DOCUMENT RESUME

ED 463 400 CE 081 297

AUTHOR Langton, Helen; Blunden, Gillian; Hek, Gill
TITLE Cancer Nursing Education: Literature Review and Documentary Analysis.
INSTITUTION English National Board for Nursing, Midwifery and Health Visiting, London.
ISBN ISBN-1-901697-35-5
PUB DATE 1999-08-00
NOTE 236p.; Includes "Cancer Nursing Education: Literature Review and Documentary Analysis. Research Highlights 37."
AVAILABLE FROM English National Board for Nursing, Midwifery and Health Visiting, Publications Department, Victory House, 170 Tottenham Court Road, London W1P OHA, England, United Kingdom. Tel: 0207-391-6314; e-mail: pubs@enb.org.uk.
PUB TYPE Information Analyses (070)
EDRS PRICE EDRS Price MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS *Cancer; *Clinical Teaching (Health Professions); Competence; Core Curriculum; Course Content; Curriculum Evaluation; Education Work Relationship; *Educational Needs; Educational Practices; Educational Research; Educational Supply; Employment Qualifications; Foreign Countries; Higher Education; Hospices (Terminal Care); Instructional Development; Job Skills; Literature Reviews; Needs Assessment; *Nurses; *Nursing Education; *Oncology; Professional Continuing Education; Professional Development; Professional Education; Records (Forms); Relevance (Education); Skill Development; State of the Art Reviews; Theory Practice Relationship; Trend Analysis
IDENTIFIERS Nurse Patient Relationship; Pain Control; *United Kingdom

ABSTRACT

The knowledge and skills needed by cancer nurses and the content and strategies of England's existing cancer nursing education programs were examined. The study included a comprehensive literature review and an analysis of course documents from selected English National Board-approved post-qualifying cancer nursing and palliative care courses offered at five major nursing education centers in England. The following key themes were identified as being significant to cancer care nursing education: prevention and detection/diagnosis; the nature of cancer; treatment; psychosocial aspects; rehabilitation and survivorship; death and dying; organization of care; key skills; and the future of cancer nurse education. Analysis of the course documents suggested that England's educational centers are able to respond positively and rapidly to the changing cancer care agenda. However, the existing curricula appeared to have major weaknesses in the areas of rehabilitation and interagency working. Concerns about the issue of assessment overload were raised. Further empirical research on the patient care-related outcomes of existing post-registration cancer and palliative care courses for nurses was deemed necessary. (Forty tables are included. The following items are appended: search strategies; data extraction sheet; list of outline curricula examined during the literature review; analytical headings, content analysis proforma, and module contents sheet. Contains 239 references.) (MN)

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ED 463 400

CANCER NURSING EDUCATION: LITERATURE REVIEW AND DOCUMENTARY ANALYSIS

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August 1999

Research commissioned by the English National Board for Nursing, Midwifery and Health Visiting

CE0812S7

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ISBN : 1 901697 35 5

Final Report available through the Publications Department
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Email: pubs@enb.org.uk

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CANCER NURSING EDUCATION: LITERATURE REVIEW AND DOCUMENTARY ANALYSIS

PREFACE

The Board is pleased to publish the report of a one year literature review and documentary analysis of curriculum documents related to cancer nursing programmes. The literature review was undertaken in seven stages and led to the identification of nine key themes. A range of programmes related to post - registration cancer nursing education and palliative care were analysed.

Through a variety of means the Board ensures that education for practice continues to be relevant both professionally and academically. Research based evidence provides a further important dimension of the development of policy. The findings emerging from this report have informed the second phase of the research which examines outcomes of education.

Professor Ron De Witt
Chairman of the Board

Professor Jeff Thompson
Chairman of Research and Development
at the English National Board

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Acknowledgements

We wish to acknowledge the academic and professional support of the following people:

ENB Steering Group

Professor Anthony Oakhill (Chair), Consultant Haematologist, Bristol Royal Hospital for Sick Children
Ms Sally Anstey, Macmillan Nurse Advisor for Wales
Mrs Sonia Crow, Assistant Director for Educational Policy (Research and Development), English National Board for Nursing, Midwifery and Health Visiting
Ms Sue Hawkett, Department of Health
Ms Heather Mercer, Marie Curie Cancer Centre, Education Department
Dame Gill Oliver, Director of Patient Services, Clatterbridge Centre for Oncology
Ms Lindsey Scott, Director of Nursing, the United Bristol NHS Healthcare Trust
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Faculty Monitoring Group

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Dr Andy Stainthorpe, NHS Executive, Research Support and Development, Unit Co-ordinator, Southmead NHS Trust, Bristol

Members of institutions that contributed course documentation and responded to questionnaires.

Malcolm McEachran, Subject Librarian, Health and Social Care, University of the West of England and other library colleagues;
Jason Bone and Mark Harwood and other faculty students;
Deborah Joy, Lisa Stenner and particularly Leigh Taylor for administrative support;
Members of the University's academic and management account staff.

Nonetheless the research team remains responsible for the project and final report.

Executive Summary

- The University of the West of England was commissioned by the English National Board for Nursing, Midwifery and Health Visiting to undertake a twelve month literature review and documentary analysis of Cancer Nurse Education during 1998.

- The aims of the project were to :

    i) undertake an extensive review of literature in the field of cancer care related to the education and preparation of cancer nurses;
    ii) undertake an extensive overview of the range of cancer nursing courses on offer in England;
    iii) provide a report and supporting papers to be disseminated widely; and
    iv) provide a foundation to develop a larger scale empirical evaluation.

- The outcomes of the study were:

    i) an analysis of the evidence base of curriculum learning outcomes of ENB post qualifying cancer and palliative care courses;
    ii) a comparison of knowledge and clinical competences derived from the documentary analysis;
    iii) an examination of assessment strategies with specific regard to the relationship between theory and practice; and
    iv) comprehensive information that will enable the ENB to develop national core competencies for postqualifying cancer related clinical courses.

- A comprehensive literature search and review was undertaken in seven stages. This was critically evaluated using a purposely designed data extraction sheet. 20 databases were searched, together with a number of key journals and indexes, and in all 334 items were obtained and evaluated by the reviewers. Of these, 93 were excluded by an initial assessment because they were not relevant, leaving 241 items that were fully evaluated. Within this figure, 194 were deemed to be of good quality in the literature review of cancer nurse education.

- 51 centres offer ENB post-registration cancer-related and palliative care programmes.

- 20 documents were returned for analysis from five of these major centres.

- 78 individual modules were examined, using a series of specially designed module proformas.

- Within the literature reviewed nine key themes were identified as being significant to the cancer care education of nurses:

i) prevention and detection/diagnosis;
ii) nature of cancer;
iii) treatment;
iv) psychosocial aspects;
v) rehabilitation and survivorship;
vi) death and dying;
vii) organisation of care;
viii) key skills; and
ix) the future of cancer nurse education

- The key findings of the literature highlighted the importance of clinical experience within the course which is increasingly difficult to achieve. Knowledge regarding the nature of cancer is seen as an important foundation to underpin practice and evidence based practice is demanded. Agreed national outcomes regarding competence in giving chemotherapy would be both advantageous and possible. Areas for improvement include knowledge of pain and pain assessment, educational support for cancer-related diagnosis for nurses working in critical care settings, the pychosocial aspects of care; interpersonal skills and rehabilitation and survivorship. There is a lack of reliable studies yielding valid evidence regarding the effectiveness of the delivery of cancer care education and its subsequent impact on patient experience. The impact of cancer-related education for nurses on patient care needs to be researched further.

- Course documents were analysed to identify:

  i) the degree of compliance with the ENB's stated aims for each programme;
  ii) how far course curricula currently draw on relevant research evidence; and
  iii) how far the stated learning outcomes of the courses relate to national healthcare priorities as regards cancer nursing.

- The documentary evidence indicated that educational centres appear to be able to respond positively and rapidly to the changing cancer care agenda.

- All awards analysed demonstrated compliance with ENB stated learning outcomes.

- Programmes have been devised to reflect both local and national priorities.

- All awards attempted to integrate the assessment of theoretical and practical learning.

- There are some interesting comparisons to be made between cancer care education and palliative care education programmes.

- The major weakness of the curricula analysed appeared to be in the areas of rehabilitation and interagency working.

- Whilst the programmes mostly appear to draw on research literature effectively, the substantive topics of health promotion, rehabilitation and communication skills could usefully be enhanced.

- In some programmes serious concerns might be raised about the issue of assessment overload.

The major implications arising from this study are:

- the quality of nursing care provided is crucial to the achievement of the government's aims as set out in 'The Health of the Nation' and reinforced in 'Our Healthier Nation' and it is important that cancer care courses are designed so as to take account of the views of all the various groups of stake holders;

- it would appear that in some Trusts as few as 2% of qualified nurses working directly with patients for whom cancer is their primary diagnosis have undertaken any specialist cancer courses at all;

- there is a shortage of evidence concerning the effectiveness of the delivery of cancer care and palliative care education programmes;

- further empirical research is needed to gauge the effectiveness of the ENB's post registration cancer care and palliative care educational programmes on patient care and clinical outcomes.

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List of ENB Numbered Courses referred to within the report

Award Number	Award Name
ENB A11	Breast Care Nursing
ENB A18	Diploma in HE in Palliative Care
ENB A27	Haematology Nursing
ENB N09	Principles of Breast Care
ENB N10	Care of Patients receiving Radionuclides
ENB N14	Principles of Haematology and Bone Marrow Transplant
ENB N34	Nursing Care in Lymphoedema Management
ENB N37	Developing Clinical Practice in Palliative Care
ENB N51	Principles of Managing Children's Pain
ENB N59	Care of the Patient having Chemotherapy
ENB N92	The Nature of Cancer and its Treatments
ENB N93	Working with the Person with Cancer
ENB 237	Oncological Nursing
ENB 240	Paediatric Oncological Nursing
ENB 285	Specialist Programme in the Continuing Care of the Dying
ENB 931	The Continuing Care of the Dying Patient and the Family

Chapter One

Introduction

1.1 Overview

In the light of the increasing emphasis within the nursing profession on mandatory continuing education and the concept of the lifelong learner, the need for cancer nurses to develop and maintain their knowledge and skills is heightened.

It has been well documented that the knowledge which nurses have about cancer as a result of their initial registration education is variable and deficient (Corner 1990; Ferguson 1994; Oncology Nursing Society 1980; Pope 1992). It is arguably the case that this long identified deficit is still apparent in the late 1990s.

Corner (1990) suggests that knowledge is considered to be a necessary pre-requisite of good care and professional development, and it is therefore imperative that this knowledge deficit is made good. However, there is very little evidence to substantiate evaluation of either pre-registration or continuing education courses demonstrating knowledge input and the impact on care. Within the latter type of programme, the need for continuing education more accurately to reflect the demands of modern nursing practice has long been recognised, and this was verified in relation to education in cancer nursing in a European survey conducted by Copp (1986).

Results from this survey were provided to the Advisory Committee on Training in Nursing of the European Community, and have been used to develop a joint publication between the European Oncology Nursing Society (EONS) and the European Commission (EONS 1989) entitled Core Curriculum for a Post Basic Course in Cancer Nursing. This curriculum offers the opportunity for educational establishments across the European Community to develop courses for nurses working or intending to work in cancer care, who have no formal education in this field. However, no evaluation studies appear to have been undertaken, either looking at the content of curricula following the use of these guidelines, or the impact of education on care.

More recent documents highlight cancer as a key health area for development (Department of Health 1992 and 1997). The Royal College of Nursing (RCN) have also published guidelines for the development of good practice in cancer nursing and cancer nursing education (RCN, Cancer Nursing Society 1990 and 1996), building on the concept of lifelong learning (ENB 1994) and defining standards for pre and post registration educational preparation and role specifications for specialist and advanced practitioners in cancer care. It is therefore timely that a literature review and documentary analysis should be carried out in order to establish whether professional education is relevant and appropriate to today's practitioners caring for patients with cancer, and to see whether these programmes are comparable nationally in terms of knowledge and clinical competencies. Furthermore, anecdotal evidence suggests that clinical courses vary widely around

the country and there is an urgent need for development of national core competencies in order to promote comparability for these courses in the future.

The ENB document outlining the post-registration courses that are on offer demonstrates that there are a variety of courses of direct relevance to cancer nursing (e.g. ENB Numbers A11 - Breast Care Nursing, A27- Haemotology Nursing, N9 - Principles of Breast Care, N10 - Care of Patients receiving Radionuclides, 237 - Oncological Nursing and 240 - Paediatric Oncological Nursing), and a variety of others that have some relevance to cancer nursing (e.g. ENB 931 - The Continuing Care of the Dying Patient and the Family and 285 - Specialist Programme in the Continuing Care of the Dying Patient). It could be suggested that this wide variety leads to confusion amongst qualified staff and managers who are seconding students to these courses. However, whilst many courses are offered nationally, there are nine main providers in England covering the majority of the courses with others mainly meeting local specific needs. It is therefore the intention of this study to gain an overview of the national picture of delivery of courses related to cancer care nursing and the context in which these are being offered. It is also the intention to relate these to the national initiatives related to the Calman and Hine report (DOH 1995) which are dominating reform of cancer care in the United Kingdom.

1.2 Aims of the Study

This one-year study was commissioned by the English National Board for Nursing, Midwifery and Health Visiting (ENB) to achieve the following aims in

respect of cancer nursing education.

1. To undertake an extensive review of literature in the field of cancer care related to the education and preparation of cancer nurses to enable them to meet the needs of patients with cancer. The review considers the levels of evidence regarding the effectiveness of nursing care, health promotion and rehabilitation activities of cancer nurses, and multidisciplinary and multi-agency teamwork.

2. To undertake an extensive overview of the range of cancer nursing courses on offer in England and the extent to which they respond to local health care needs, yet have national comparability in terms of knowledge and clinical competence. In relation to the first aim, learning outcomes and course content are considered in the light of the evidence base identified from the literature review and also the extent to which learning outcomes reflect multidisciplinary and multi-agency teamwork, rehabilitation and health promotion in the area of cancer care. Assessment strategies are examined in terms of the relationship between theory and practice and the overview is informed by users and educationalists to enable the courses to be considered in context.

3. To provide a report and supporting papers that can be disseminated to a wide range of interested parties. A report for the Board will provide information to enable the development of core competencies with national comparability related to the latest evidence. Other papers will be written for educationalists and curriculum developers, service providers in the field of cancer care, and

policy makers.

4. To provide a foundation that can be used to develop a larger scale empirical evaluation that could evaluate the outcomes of some of these courses, particularly in terms of the effectiveness of the programme enable nurses to meet the health care needs of the patient with cancer.

1.3 Study Outcomes

In order to fulfil these aims the study achieved the following outcomes.

1. An analysis of the evidence base of curriculum learning outcomes of the cancer courses considered in this review.

2. A comparison of knowledge and clinical competencies derived from the documentary analysis. This included an examination of learning outcomes relating to multidisciplinary and multi-agency teamwork, rehabilitation and health promotion.

3. An examination of assessment strategies with specific regard to the relationship between theory and practice.

4. Comprehensive information that would enable the Board to develop national core competencies for cancer related clinical courses.

1.4 Study Outline

In order for the Board to consider the study, the chapters are outlined below.

Chapter One provides an introduction to the context of cancer nurse education and the aims and outcomes of the study.

Chapter Two addresses the literature review methodology. The context and parameters of the review are outlined in order to ensure the reader is clear as to how the literature review process was developed and implemented. The search strategy and processes are described in seven stages with great attention to detail in order to provide an audit trail. The nine key themes, which are used throughout the rest of the study, emerge within this process and are detailed. The chapter concludes with the limitations of the literature review.

In Chapter Three, the thematic analysis of the literature is presented through the nine key themes. Further literature is also presented which examines the educational needs of cancer nurses as perceived by cancer nurses themselves in order to consider whether their perceptions and that of cancer nurse experts are in agreement in terms of educational needs. Following analysis of the main body of literature, literature pertaining to cancer nursing in the 21st Century is examined to identify whether and how cancer nurse education courses may need to change in order to

reflect new trends. Teaching models and strategies are also addressed, again reflecting the change in demands on the service.

Chapter Four outlines the processes and findings of the documentary analysis. Details of the sample are given and, using the nine key themes, the analysis and findings are offered for consideration. In order to establish the availability of cancer nurse education, a national survey was undertaken. The results of the survey are included and discussed within this chapter. This chapter also outlines the wide variety of award structures within which ENB Cancer Care courses lie, the development of courses to reflect local and national needs and the variety of assessment strategies adopted within these courses, thus giving a comprehensive overview of ENB courses related to cancer care as they currently stand.

In Chapter Five, the discussion of the findings is presented. Key issues are clearly identified and their implications for the future in terms of research and educational practice are given.

In this way the study is presented as a cohesive whole for consideration by the ENB.

Chapter Two

Context and Parameters of the Literature Review Methods

Key Points	
•	A comprehensive literature search and review was undertaken in seven stages
•	All 'types' of literature were included
•	All literature was evaluated critically using a purposely designed data extraction sheet
•	Previously validated 'checklists' were used to assess the quality of research articles and review papers

2.1 The need for comprehensive and critical literature reviews

Systematic reviews are widely accepted as providing a reliable source of information about the effectiveness of health care (Chalmers and Altman 1995) and are 'central to the drive for evidence-based health care' (Parahoo, 1997 p94). They aim to provide an overview of work in a specific area by finding, evaluating and synthesising evidence from research studies. A comprehensive summary of the available evidence is provided with minimal bias and error caused as a result of incomplete or inappropriate selection of literature. There are clear published guidelines that can be followed in order to carry out a full systematic review (NHS Centre for Reviews and Dissemination 1996) and the whole process of undertaking literature reviews is becoming increasingly rigorous with its own methodology and

scientific activity (Mulrow 1995). Undertaking full 'systematic reviews' as defined by the NHS Centre for Reviews and Dissemination (NHS Centre for Reviews and Dissemination 1996) requires good resources including reviewers who are skilled in all the necessary methodological processes.

A full 'systematic review' is beyond the scope and resources of many due to its laborious, time consuming and arduous nature (Mulrow 1995, Parahoo 1997) and its reliance on randomised clinical trials. However the principles and techniques can be used to good effect in providing a comprehensive and critical literature review. There is some useful guidance available for the task such as Booth (1996), Droogan and Song (1996), Mason (1993), Schira (1992), and de Vet et al (1997) who provide advice on the overall process of producing a comprehensive review. Others focus on different stages of literature reviewing such as searching (e.g. Barber 1995; Brazier and Begley 1996; Burnham and Shearer 1993; Hek 1994; Lefebvre 1994; Roberts 1992;) critical evaluation and critical appraisal (e.g. Avis 1994a, 1994b; DuRant 1994; Finlay 1997; Gould 1994; Hek 1996a, 1996b; Ryan-Wenger 1992;) and the synthesis of the review material (e.g. Mulrow 1994; Pinch 1995). There is also specific guidance available to aid the appraisal of particular aspects of research such as evaluating qualitative studies (e.g. Boulton and Fitzpatrick 1997; Britten et al 1995; Hinds et al 1990), assessing the quality of randomised controlled trials (e.g. Moher et al 1995) or critiquing the ethical aspects of studies (e.g. Firby 1995). As can be seen, there has been a wealth of literature regarding the techniques of undertaking comprehensive reviews within the last few years, complemented by research methodology texts. Additionally a series of

articles was produced in the British Medical Journal by Trisha Greenhalgh and reproduced as a book (Greenhalgh 1997) which covered all aspects of reading research papers critically, from randomised controlled trials to qualitative research.

Systematic reviews endeavour only to include studies which have low susceptibility to bias, and randomised controlled trials (RCT) are the preferred design to include because they provide reliable estimates of effect. Meta-analysis, the synthesis of results from several individual studies into a single finding, is a technique now often used for numerical data generated from trials which are then statistically analysed. It can transform a literature review from a subjective narrative into an objective study (Cullum 1994), however it can be fraught with problems (Eysenck 1995) including the fact that poor quality studies could be included. Some argue (e.g. Parahoo 1997) that experiments are not the only or best way to explore clinical issues and that an emphasis on quantifiable aspects of clinical situations can deny social and psychological aspects (B H Smith 1996). Furthermore, there are some areas of health care that have not been investigated using RCTs and in some circumstances, different study designs are more appropriate. In nursing, the debate about the appropriateness of different research methodology to explore the practice of nursing is gaining momentum. Smith (1998), in an edited text, gathers a range of views, including a discussion about whether nursing should develop its own research methodology. Interesting and enlightening as these debates are, this literature review on cancer nurse education has taken the view that the research approaches and methods used in any study should be designed to answer the

research questions (Bowling 1997, Hek et al 1996, Parahoo 1997), and that a good quality and valid piece of research has been undertaken in the process.

An essential element in selecting studies of differing designs to include in a review is that of assessing validity and forming a hierarchy of evidence can help in this process. The hierarchy reflects the degree to which different study designs are susceptible to bias (NHS Centre for Reviews and Dissemination, 1996) and can include weaker evidence where little research has been undertaken, although the focus is primarily on experimental design.

In nursing there has been a clear drive for comprehensive literature reviews (e.g. Cullum 1994). However, published reviews in nursing journals have been subject to criticism in recent years for a number of reasons including the fact that: they do not identify strengths and weaknesses in primary research; reviewers only use a subset of the available literature and only include published research; little of the methodology is reported; reviewers often draw 'simplistic, erroneous or inaccurate conclusions from the study's findings' (Cullum, 1994 p47). Booth (1996) comments that a 'satisfied but inept searcher' (p26) can retrieve what they believe to be sufficient and relevant literature yet be unaware of missing items. This could result in a poorly executed review that is really a descriptive narrative of 'who has done what' within the topic of interest, rather than a comprehensive and critical appraisal of the best quality evidence. Perhaps of more concern, Lefebvre (1994) points out that the poor quality of many reviews, not just in nursing, has resulted in advice for effective health care being delayed for many years.

2.2 Guiding principles for the project team

The research team were mindful of the criticism of descriptive and uncritical literature reviews and the issues of bias with regard to particular types of research. We were, however, pragmatic with regard to the aims and boundaries of this one year project. We sought to emulate the principles of systematic reviews without claiming that this was a full systematic review such as those carried out by the NHS Centre for Reviews and Dissemination (1996). The supporting literature as evidenced in the previous section (2.1) was used to guide the reviewing process including finding, evaluating, pooling and synthesising the available literature. It was evident early on in the project, that the area of cancer in health care education has not been fully investigated using reliable studies of effectiveness such as RCTs with regard to educational interventions. Indeed, as will be demonstrated, the main body of evidence comes from studies which have some susceptibility to bias, and yet offer extremely important insights into the whole area of investigation.

The principles guiding the literature review thus include being systematic, explicit, thorough and rigorous. This is illustrated throughout this chapter by providing detailed descriptions of the search strategy, clear criteria for including a piece of work in the review based on the research questions, and explicit criteria for assessing the quality of each item included. The overall aim of the literature review is that of informing the analysis and interrogation of the curriculum documents which was undertaken alongside the literature review, and the project team were mindful of the iterative nature of the process. The literature reviewing process is

described in some detail and limitations are identified to enable future reviewers to learn from our endeavours.

2.3 Developing the search strategy

The first factor considered in developing the search strategy was to achieve a balance between high recall and high precision, and provide as comprehensive a list of published and unpublished studies as possible that were suitable for inclusion in the review. When 'education/courses/learning' terms and headings were used in combination with the main search strategy, it dramatically reduced the available literature in the field of cancer nursing. A comparison was made of the search results with and without the 'education' type of headings and it was apparent that potentially relevant items would be missed if 'education' types of terms and headings were used. It was therefore decided that the main search would require two separate approaches, with the first computerised searches including all `hits' for cancer nursing and associated terms and headings without the restriction of 'education' types of terms, and the second stage would be a manual selection by two reviewers of 'education' types of literature. This two-pronged approach increased the magnitude of the task confronting the reviewers. However the risk of missing relevant literature would have been too great with a really sensitive search strategy which had low recall but high precision.

2.4 Literature reviewing process

The whole process of searching and reviewing the literature was undertaken in seven main stages with some logical progression from one stage to the next. It would be wrong to suggest, however, that each stage was separate, and needed completion before the next stage was commenced and in fact it was more likely that a number of stages were proceeding simultaneously using a more iterative and concurrent process.

The stages of the reviewing process were:

Stage one **Main computerised database search**

Stage two **Narrow and more focused manual selection**

Stage three **Supplementary searching**

Stage four **Management and acquisition of relevant literature**

Stage five **Quality evaluation of literature**

Stage six **Literature review saturation**

Stage seven **Thematic review of the literature**

2.4.1 Process in detail

Stage one Main computerised database search

Selecting databases

There are many databases and bibliographic sources available and 20 relevant electronic databases were selected for inclusion in this review of cancer nurse education.

The databases searched were:

- Allied and Alternative Medicine (AMED)
- Applied Social Sciences Index and Abstracts (ASSIA)
- British Nursing Index (BNI)
- CANCER-CD (Cancer-related records from CANCERLIT and EMBASE)
- Caredata
- Cochrane Library
- Cumulative Index to Nursing and Allied Health Literature (CINAHL)
- Current Research in Britain (CRIB)
- DHSS-DATA
- Dissertation Abstracts (DISS)
- Educational Resources Information Center (ERIC)
- ENB CD-ROM
- Index to Scientific and Technical Proceedings (ISTP)

- Index to Theses (accepted for higher degrees by the Universities of Great Britain and Ireland)
- International ERIC
- Medline
- National Research Register (NRR)
- PsycLit
- Sociofile
- System for Information on Grey Literature in Europe (SIGLE)

The main nursing databases such as CINAHL, ENB, and BNI were clearly important for their emphasis on nursing and although CINAHL has a North American bias, ENB and BNI would more comprehensively cover U.K. material. Because of the multi-disciplinary nature of the subject, Medline, ASSIA, Sociofile and PsycLit were felt to be appropriate and they would also cover the multi-professional nature of cancer care and therefore education. CANCER-CD focuses on cancer, so was clearly important for general coverage. AMED was searched because complementary therapies can play a part in the education of cancer nurses, and Caredata would cross any primary/secondary care boundaries, and also the health/social care overlap. ERIC and International ERIC would cover any specific education literature that might not have been picked up in other databases, and DHSS-DATA would include official publications. 'Grey' literature would be picked up through SIGLE and ISTP, and the Cochrane Library would include any reviews. Relevant dissertations and theses would be discovered through a search of

DISS and Index to Theses. Finally, recent and ongoing research should be picked up through CRIB and NRR.

Devising the Search Strategy

The team devising the search strategy was mindful of the need to include nursing care; health promotion; rehabilitation; and multi-agency/multidisciplinary team work as components of cancer education courses. This was accomplished by using broad 'nursing' terms and broad 'cancer' terms which would include all the above aspects if a nurse were involved with patients with cancer. In databases offering a well constructed thesaurus, the search strategy relied heavily on the use of thesaurus terms. In the case of CINAHL the addition of free-text terms was tried and found not to be worthwhile, therefore only thesaurus terms were used. The search strategy for CINAHL was as follows:

1. **exp oncologic - nursing**
2. **exp neoplasms/nu**
3. **hospice - nursing**
4. **oncologic - care**
5. **exp terminal - care**
6. **cancer - pain**
7. **exp chemotherapy - cancer**
8. **1 or 2 or 3 or 4 or 5 or 6 or 7**

Note:

- A hyphen (-) indicates a multi-word thesaurus term
- exp: explode. Exploding a thesaurus term includes all the narrower terms
- /nu: only the subheading 'nursing' was searched. Unless otherwise specified, all the subheadings were searched

In databases without a well constructed thesaurus, a free-text strategy was used supplemented by controlled terms when available. The free-text strategy, which in most databases was applied to all searchable fields, was as follows:

1. **nurs or nurse or nurses or nursing**
2. **cancer or neoplas* or oncol* or tumor* or tumour* or hospice* or terminal or terminally or palliative**
3. **1 and 2**

Note:

- An asterisk (*) indicates truncation
- The term 'nurs' was included to cover journal title abbreviations

The nursing terms were omitted in databases primarily concerned with nursing, and in CANCER-CD the cancer terms were omitted. In order to keep the breadth of coverage within manageable proportions, terms relating to specific cancers were not included in the free-text searches. In PsycLit and Sociofile the strategy was broadened to encompass various aspects of death and dying.

Most database searches, particularly the significant ones, were searched from 1987 so as to include ten years of literature. Due to the way that some of the bibliographic sources have been produced and published, a few of the smaller databases included literature only from the last few years and a couple go back to 1980. Full details of each individual search strategy including dates of inclusion, is given in appendix one.

Stage two Narrow and more focused selection

As a result of the search of the 20 databases, 28312 items were retrieved. These were all printed out, with the exception of those from the ENB database which due to technical problems had to be examined by looking at the computer screen. These 'hits' were not necessarily related to 'education' in any way, therefore two reviewers examined the bibliographic details, including titles and the descriptor terms used, and abstracts where they were available. Items were then selected for inclusion if they were relevant to 'education' in the broadest sense, and addressed one of the following research questions which were necessarily broad:

1. How are cancer nurse education courses organised?

2. What type of cancer nurse education courses are most effective?

3. What should cancer nurse education courses contain, including:

   aspects of health promotion

aspects of rehabilitation

multi-disciplinary and multi-agency teamwork

research base, level of knowledge and clinical skills?

4. How should cancer nurses be assessed during their education courses?

5. What evidence exists for the cost effectiveness of cancer nursing education courses?

This resulted in a much more precise selection of relevant items and a narrow and more focused selection of items for inclusion in the review (see table 2.1).

Table 2.1 Search results

Database	Number of references retrieved using search strategy		Number initially perceived as relevant	Percentage (%) perceived as relevant
AMED		512	16	3.1%
ASSIA		569	20	3.5%
BNI		1296	52	4.0%
CANCER-CD		10,610	167	1.6%
Caredata		147	0	0%
CINAHL		6323	224	3.5%
Cochrane Library	Cochrane Database of systematic reviews: Complete Reviews	16	0	0%
	Cochrane Database of systematic reviews:			

	Protocols	5	0	0%
	Database of Abstracts of Reviews of Effectiveness (DARE): Abstracts of quality assessed systematic reviews	3	0	0%
	DARE: ACP Journal Club: abstracts of reviews	1	0	0%
	DARE: Other assessed reviews, bibliographic details	6	0	0%
	DARE: Other reviews	1	0	0%
	Cochrane Controlled Trials Register	230	4	1.7%
CRIB (current research in Britain)		21	0	0%
DHSS-DATA		600	12	2.0%
DISS		1262	1	0.1%
Dutch Current Research		7	1	1.4%
ENB		559	26	4.6%
ERIC		40	8	20%
Index to Theses		39	2	5.1%
International ERIC Australian Education Index		3	1	33%
British Education Index		2	0	0%

Canadian Education Index		1	0	0%
ISTP (Index to Scientific and Technical Proceedings		242	4	1.6%
Medline		5096	185	3.6%
NRR (National Research Register)	MRC Clinical Trials Directory	0	-	-
	Register of Registers	0	-	-
	Health Research at York	1	0	0%
	Register of Reviews in progress	1	0	0%
NRR Projects Database	Ongoing	19	1	5.2%
	Complete	38	0	0%
PsycLit		471	18	3.8%
SIGLE		28	3	10.7%
Sociofile		163	1	0.6%

Of the 28312 items selected from the 20 databases, 746 items were manually selected by the two reviewers and perceived as relevant to the research questions. A comparison of the selections made by the two reviewers was undertaken in order to reduce bias. Items selected were mainly in the English language, although a few items not in English were included if perceived as essential, as translating services were available to the project team.

Stage three Supplementary searching

In addition to the main computerised database searches, the following journals were hand searched for relevant items:

Journal of Palliative Care

Palliative Medicine

References were also retrieved from personal collections, serendipity, experts in the field of cancer nurse education, and from the curriculum documents acquired for the curriculum analysis stage of the project. This supplementary searching added a further 82 items to the 746 selected through the computerised search of the databases. At this stage it was not possible to ascertain how many of these references were unique, as there was considerable overlap across the databases.

Stage four Management and acquisition of relevant literature

The bibliographic software programme 'ProCite® for Windows' (ProCite® for Windows 1996) was utilised to manage the large number of references, and identify duplicates. Due to the fact that 20 databases were searched, the potential for overlap was large. It is difficult to say how much each database overlapped with others, and is beyond the scope of this project to provide accurate data. It would appear, however, that CINAHL and Medline overlapped by about 20%, and that the majority of 'hits' in BNI and the ENB databases would have been found through

CINAHL and Medline although a few were unique. CANCER-CD had some unique references, and so did PsycLit, Sociofile, ERIC, ASSIA and AMED. With such a large range of databases available today, this could be quite an important area to explore, as costs, effectiveness and ease of use are clearly important considerations.

After the majority of duplicates (402) had been eliminated by hand and by using the bibliographic software programme, two health care students were employed on an hourly basis to retrieve the selected items from the searches in stages one, two and three. Some items from stage three had been acquired by the reviewers as they were discovered. The students photocopied available items from the University Library, and requested other items through inter-library loans. They were employed for a total of 50 hours on this task.

The references in the papers acquired were also examined by the researchers for two main reasons. The first was to pick up any other material that had been missed during the main searches, and the second was to give some confidence that the search had been comprehensive. The reviewers were reassured that the search strategy in all its forms had provided as comprehensive a search as was possible in the time frame.

Stage five Quality evaluation of literature

In addition to the 402 duplicates identified in stage four, further items were removed for a variety of reasons.

Not in English language	17
Pre registration nurse education	8
Before 1987	6
Duplicates obtained erroneously	22
Mistaken requests	5

Despite earlier identification of duplicates, a number of duplicates were still erroneously obtained and there were a few mistaken requests. The non-English language items were all brief commentaries or fact sheets, and were therefore excluded at this point. Other items that had been obtained were excluded as they were not relevant or appropriate. In addition, 34 items including one thesis were not obtainable at all despite repeated requests.

A final total of 334 items were obtained and were evaluated by the reviewers.

Assessing the validity and evaluating the quality of each of the 334 items before inclusion in the review was essential if a comprehensive review of only high quality literature was to be achieved. It had become evident early on in the project that although there were very few experimental and observational studies related to the education of cancer nurses, there were many more non-intervention and descriptive studies, as well as literature that was based on clinical experience or opinion. Published 'hierarchies of evidence' to aid evaluation (e.g. NHS Centre for Reviews and Dissemination, 1996) were rejected because of their emphasis on experimental

or observational designs of study and offered no guidance on how to evaluate other types of material.

Due to the nature of the topic, the aims of the project, and the importance of gathering any available good quality work on the subject, all relevant literature that had been located was evaluated critically and included in the review. This was extremely labour intensive, but a worthwhile activity, and was made much easier by using a purposely designed 'data extraction sheet' (see appendix two), which incorporated two published and previously validated checklists which were used for research studies. The data extraction sheet asked a number of questions, and enabled quick assessment and exclusion of any literature that was still included at this stage but ultimately deemed irrelevant. The data extraction sheet also incorporated a summary which was most useful with so much literature.

Of the 334 items that had been acquired so far in the searching process, 93 were excluded by this initial assessment because they were not relevant. This left 241 items that were fully evaluated.

For each item, the first decision to make was deciding if it was primary research, a literature review, or other kind of material. Primary research studies were then evaluated using Gray's (1997) criteria for critical appraisal. This 'checklist' was selected for use because it incorporated appraisal of different types of research e.g. studies of effectiveness, qualitative research, surveys etc. It did assume, however, that the reviewers could make decisions about whether the research design was

appropriate. Literature reviews were evaluated using Oxman and Guyatt's (1991) quality index for review articles. Aids to the evaluation and appraisal process such as Chalmers and Altman (1995), Crombie (1996), Mays and Pope (1996) and Sackett et al (1997) and literature such as that described in the introduction to this chapter were used to help the reviewers in their critical analysis.

Literature that was neither primary research nor a review article, was assessed for accuracy, credibility and quality. The journal in which the item was published was also assessed for quality, particularly with regard to being peer reviewed. Booth (1996) comments that assessments of quality can be based on extrinsic factors such as the source journal, and the reputation of the author and the institution and we considered these factors in our assessments. The final aspect that the reviewers considered was whether an item 'rings true'. This seems quite subjective: however, we would argue that as knowledgeable and critical professionals, our judgements were appropriate for general literature on the subject of cancer nurse education. This seems to fit in with what Mays and Pope (1996) consider as part of their criteria in determining whether the conclusions of a qualitative study are valid, particularly about whether an explanation coheres with what we already know, and the notion of a 'thoughtful participant' in the setting.

The 'data extraction sheet' was pre-tested for reliability on 18 items of literature by two independent reviewers and full agreement was achieved with regard to the assessment of quality of the literature. The only differences identified were to do with terminology used in the summary description of the studies.

After the data extraction process, a further 47 items were excluded because of poor quality or because they contributed nothing 'new' to the project (e.g. guidelines that were updated and published every year). This left 194 good quality items included in the review.

Table 2.2 Type of literature contained in the review

Research articles (including reviews)	
Survey	24
Pretest/post test	10
Experimental/quasi experiment	7
Literature reviews	7
Evaluation Studies	4
Qualitative studies	3
Needs assessment	2
Comparative study	1
Delphi study	1
	59

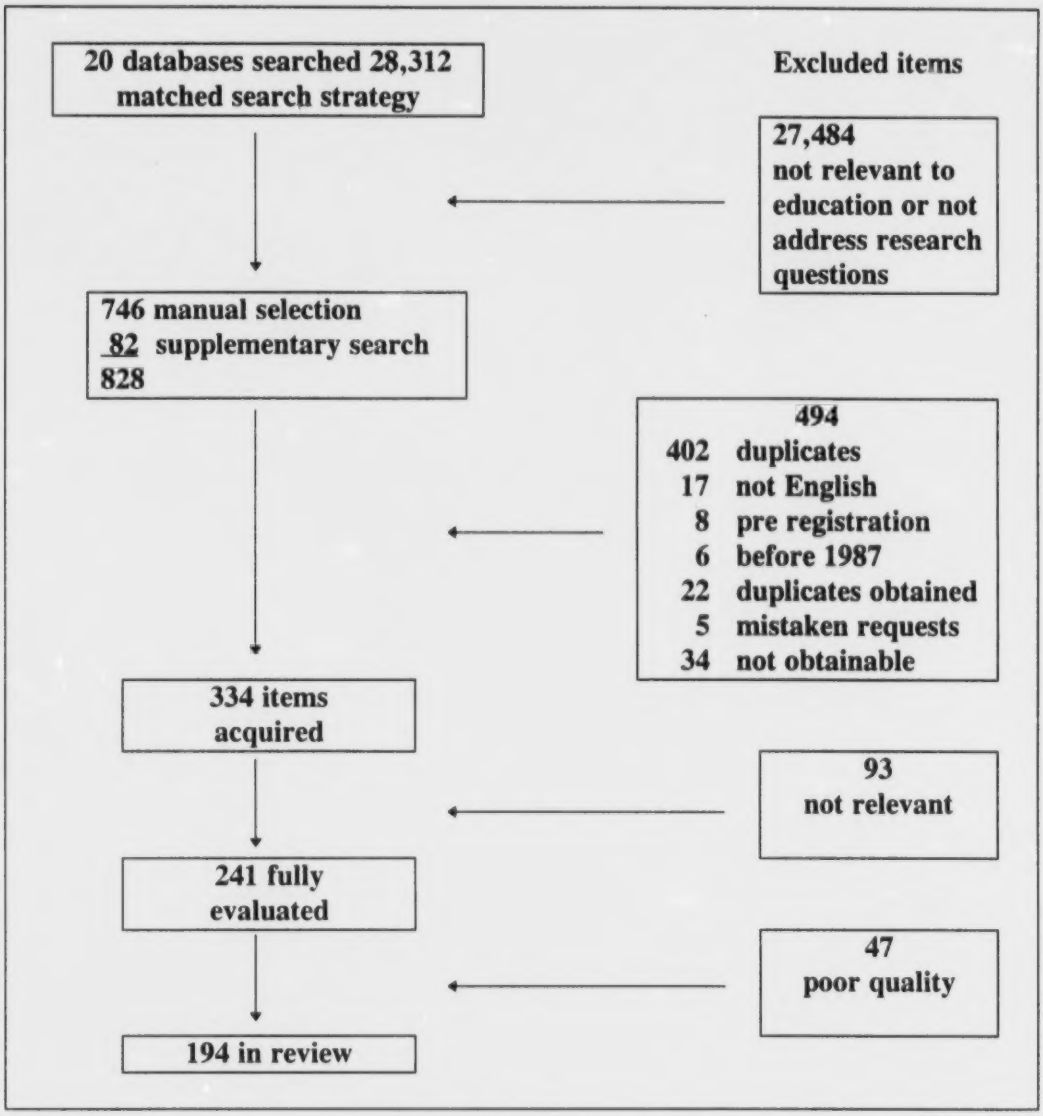
Other types of work	
Description/overview/discussion	46
Teaching/learning strategies	31
Detailed curriculum/guidelines	17
Very brief reports/news	15
Opinion/editorial/letter/comment	12
Clinical update/learning unit	11
Abstract/dissertation abstract	3
	135

As can be seen from table 2.2, only a third of the literature was research, with the main bulk of the material being more discursive in nature. Of the research articles, the majority were surveys, and there were only seven review articles. There were a few pretest/post test and experimental types of study that considered different ways of educating students, but the lack of studies regarding the effectiveness of delivery of cancer education was disappointing. We were also surprised to find only a few qualitative studies about the 'student experience' of education. Overall, North American literature dominated, and there was some innovative practice that is considered in detail in the review.

We were glad that we had not dismissed the non-research literature, as there were some very important policy documents, descriptions of teaching/learning innovations, and analysis of educational strategies that informed the literature review and documentary analysis. We felt that this gave a strong argument for including such material in a literature review, although it did mean that the amount of material became almost unwieldy at times. It also meant that we had to devise some criteria for the evaluation of the quality of such material, and the time spent developing such guidelines bore fruit in the final analysis.

Table 2.3 summarises the whole searching process and provides a brief audit trail showing how we arrived at 194 articles from the original 28,312 from the databases. It is difficult to see how the huge number of hits at the start of the search could have been reduced by a more sensitive search strategy without losing large amounts of good quality and relevant material for the review.

Table 2.3 Summary of literature searching process



The majority of articles used in the literature review came from a few key journals. Table 2.4 lists the main journals, which would be useful if a computerised database search is not possible and there was reliance on hand searching journals.

Table 2.4 Key journal sources

Oncology Nursing Forum	72
Cancer Nursing	22
Journal of Cancer Education	13
Nursing Standard	13
Journal of Continuing Education in Nursing	12
Journal of Advanced Nursing	10
Journal of Pain and Symptom Management	10
European Journal of Cancer Care	9
Oncology Nursing Society News	9
Palliative Medicine	9
Journal of Palliative Care	8

The number of hits for all other journals was five or under, and it is interesting that the North American journals dominate the field, although some articles were European or Australian.

Stage six Literature review saturation

CINAHL and Medline were searched again in June 1998 with the same strategies in order to update the literature used in the review. The same techniques of evaluation as described in stage five of the literature review process were used to ensure that only relevant and good quality literature was incorporated into the thematic review.

Reference lists and bibliographies in the articles cited in the review were examined and when no more new material was found, this was taken as some indication that saturation point had been reached. The research team felt fairly confident that all available routes had been considered although total completeness could never be

fully guaranteed due to the nature of the reviewing process and the limitations of a one year project.

A comprehensive list of included references was produced and sent to experts for checking and consideration during the final stages of the project. Nothing new was discovered by the experts.

Stage seven Thematic review of literature

The overall aim of the literature searching process was to provide a comprehensive set of literature that had been critically analysed and would form the backdrop for the review. The literature review provides an extensive overview of literature in the field of cancer care related to the education and preparation of cancer nurses to enable them to meet the needs of patients with cancer.

Each item of literature that was included was re-read and together with all the literature, analysed thematically. The analysis reconsidered the research questions, and identified nine themes that were then used to interrogate the curriculum documents.

The nine themes were:

- Prevention and detection/diagnosis
- The nature of cancer
- Treatment

- Psychosocial aspects of care
- Rehabilitation and survivorship
- Death and dying
- Organisation of care
- Key skills
- The future of nursing

The thematic review of the literature is fully reported in chapter three.

2.5 Limitations of the literature reviewing process

The literature search for this project has been comprehensive and systematic and the research team have been explicit about the processes undertaken. By undertaking such a broad search, high recall was achieved, but high precision had to be achieved through examination of thousands of individual bibliographic details. This was labour intensive, and had not been fully built into the project schedule.

Searching 20 different computerised databases, in retrospect, was probably unnecessary as there was a good deal of overlap. However, there are very few published studies that compare different databases and the research team were concerned that they would miss something. Further work will be undertaken and published so as to aid future researchers in their searching techniques with regard to database overlap. A bibliographic software programme to manage references and identify duplicates is essential in a project of this size. ProCite® for Windows

(ProCite® for Windows 1996) was effective. However it did not identify duplicates very readily although it was generally easy to use.

The research team has only included literature that has been evaluated critically and with due regard to validity. This has not only been research studies, but other literature such as policy documents and discursive papers. This may be seen by some as a limitation because reliable estimates of the effect of education cannot be made, however, we see this as a strength because all appropriate literature has been considered. This is particularly important in areas where there has been little previous research such as cancer nurse education.

The literature in the review has a strong North American bias and is frequently published in North American Journals. However, the themes identified are not culturally sensitive and are relevant for British Nursing today. The literature also addresses the questions posed at the beginning of the search process.

Summary of Points	
•	20 computerised databases were searched, and a number of key journals and indexes were examined
•	28312 items matched the computerised search strategy and these were narrowed down to 334 items which were evaluated by two reviewers .
•	All items included in the review were appraised and evaluated critically
•	194 good quality items were included in the literature review of cancer nurse education

Chapter Three

Analysis of the Literature

Key Points	
•	Identification of educational needs by cancer nurses used as a starting point
•	The literature within the nine key themes that emerged through the literature review is analysed
•	Cancer Nursing in the 21st Century is considered
•	Literature relevant to teaching models/strategies for Cancer Nurse Education is examined

3.1 Introduction

As outlined in the previous chapter the process of literature searching and reviewing has allowed nine key themes to emerge. However, surrounding these specific key themes is the current context of cancer care education and some examples of current educational programmes available world-wide for cancer care nurses.

This chapter will commence with a review of the literature that looks at the self-identification of educational needs by nurses working in the area of cancer. This is useful background literature and will allow the analysis to consider whether the stated educational needs of nurses are the same as those perceived by course

developers and other stakeholders. Secondly, it will allow an insight into whether courses are currently designed to the stated needs of cancer nurses.

The nine key themes outlined in Table 3.1 will then be addressed, exploring the literature in relation to its type identified in the reviewing process, e.g. research, systematic literature review, discussion paper, outline of curriculum. Within each key theme a clear indication of the breakdown of the type of literature within it is given.

Table 3.1 Key Emergent Themes

Prevention and detection/diagnosis
Nature of cancer
Treatment
Psychosocial aspects
Rehabilitation and survivorship
Death and dying
Organisation of care
Key skills
The future of cancer nurse education

Interwoven within each theme are the outline educational programmes from ten countries found in the course of the review, alongside the European Oncology Nursing Society (EONS 1989) curriculum and the Royal College of Nursing Guidelines for Good Practice in Cancer Nurse Education (RCN 1996). This is intended to allow a comprehensive exploration of the current literature pertaining to cancer nurse education and demonstrate how each theme is relevant to the whole.

To conclude the chapter, two areas will be considered. Firstly, there is an emerging body of literature that is beginning to explore the concept of cancer nursing in the 21st Century. Whilst the vast majority of this literature is from the USA, it is useful to compare the suggested content for cancer nursing courses arising from that literature with the suggested role of the cancer nurse in the future. This allows insight into whether course content may need to change in the future, and if so, in which direction. Secondly, a section of literature gathered identified either good practice or innovative practice in the delivery of cancer nurse education. This was related to teaching strategies within the classroom as well as to wider models of delivery e.g. distance learning. In the light of the ever increasing difficulty of the release of nurses to attend courses and the difficulties of long distance travel, it is relevant to explore the suggestions within the literature for non-traditional modes of delivery in order to make recommendations for the future delivery of courses.

3.2 Identification of educational needs by nurses working with cancer patients

Table 3.2 Type of literature reviewed

Research Studies	4
Research Abstract/Reports	3
Educational Guidelines	3
Discussion Papers	3

An important factor when designing any curriculum is the insight into the nature of the client/patient group that the students are involved with, and the needs which these students perceive the clients/patients have. Literature within this category fell into two distinct areas relating to the perceptions of client/patient need by:

- newly qualified nurses caring for cancer patients in both general and specialist settings
- more experienced specialist cancer/palliative care nurses

3.2.1 Newly qualified nurses

Corner and Wilson-Barnett (1992) conducted a survey and educational evaluation around the needs of the newly registered nurse working with cancer patients. A questionnaire and the use of group discussion elicited perceived knowledge needs and more detailed feelings of these nurses in relation to cancer care. This was followed by the development of an education workshop and seminars orientated towards the needs of these nurses. Data were collected from participants through a pre-assessment questionnaire, semi-structured interviews, pre and post intervention and written evaluations.

The research methodology was well described. The use of both quantitative and qualitative data, and the use of triangulation allowed the evaluation of both process and outcomes and overcame deficiencies and biases arising from a single method of data collection (Denzin and Lincoln 1994).

The main needs identified by these nurses prior to any specific educational intervention were in the areas of communication skills specific to caring for cancer patients (e.g. talking to dying patients); pain and symptom control; prevention and detection. The study demonstrated considerable development of confidence in these areas by the nurses in completion of the workshops and some increase in those who had attended the seminar. This was attributed to the teaching strategy adopted within the workshop which allowed for sharing of experiences and a more experiential approach to learning.

However, on three month follow up, this competence had decreased. This was attributed to the ability of the nurse to apply new found knowledge to practice and the presence or absence of a supportive work environment. It was also attributed to the type of ward in which the student worked e.g. specialist cancer area or general medical/surgical ward and other factors which impinge on any newly qualified nurse e.g. stress.

Whilst this work was reported in 1992, more recent concerns arising from surveys reported following the Calman and Hine report (DOH 1995) suggest that few nurses undertake specialist cancer courses and that these concerns remain valid (Closs et al 1996). Whilst this was the only British research paper, others from North America, although different in nature, also identified similar perceived education needs of staff. These are outlined here for comparison.

Ropka et al (1992) undertook a survey to elicit a job analysis/role analysis of nurses working with cancer patients in the United States of America. The literature reviewed and the data collected clearly demonstrated the job dimensions and responsibilities of the stratified random sample under study. There were 3000 questionnaires sent and a 40% response rate. The main findings of the questionnaire survey were that nurse respondents identified the following educational needs as being important to them in their continuous professional development as cancer nurses (see table 3.3).

Table 3.3 Perceived educational needs of nurses working in cancer care

Ropka et al (1992)	McMillan et al (1997)
Diseases	Diseases
Treatment	Treatment
Pathophysiology	Genetics
Prevention and detection	Prevention and detection
Epidemiology	Health promotion
Symptom control	

However, from the research report it is unclear as to whether the educational needs are solely those perceived by the nurse respondents in the study or are to some extent influenced by the experts in the field.

A similar survey was conducted by McMillan et al (1997) by means of a questionnaire which was sent to a random sample of oncology nurses in the USA. A response rate of 1,200 out of 3,000 was achieved. They eliminated those with MSc and Higher Degree. No other method of data collection appears to have been

used. As with Ropka et al (1992), the survey design was not included in the report and therefore it is difficult to judge its validity. However, both these surveys, despite being five years apart, outlined the same stated educational needs of nurses working with cancer patients (see table 3.3)

It is interesting to note that McMillan et al (1997) discovered a decrease in interest in the areas of prevention, detection and health promotion from that shown in a previous survey they had carried out. This was attributed to the fact that their current sample was hospital rather than community based, and therefore the sample was thought not to see their role as that of health promoted/educator. Whilst this may be an accusation that could be levelled at many tertiary care workers, the sad outcome was that McMillan et al (1997) changed their course to reflect this by reducing the amount of course content devoted to preventive detection.

From an educational standpoint it is argued that a course should not only be based on needs of the students, but wider expert knowledge of the healthcare needs of the population which, in cancer care in the UK, includes a great emphasis on cancer prevention, not only cure. It is therefore important to ensure a balance of the curriculum to include issues of prevention and detection. Within the ten international outline curricula later examined, prevention and detection were all given credence although to what extent is unsure.

Becker et al (1995) also conducted a survey looking specifically at stated education needs of nurses working in Texas, USA with cancer patients. The research aim was

clearly identified, 'to evaluate progress towards meeting cancer education needs of nurses and identification of oncology education needs and skill levels'. The response rate was poor from the stratified random sample identified. This was a geographic sample of 3,714 nurses in Texas with 10% response rate.

However, the stated educational needs of these nurses working with cancer patients, (see table 3.4) whilst not generalisable on their own, are similar to those identified in the previous studies. The findings are therefore useful to include as a comparison with those of the other studies.

Table 3.4 Identification of education needs from the work of Becker et al (1995)

•	Prevention and detection/diagnosis
•	Treatment e.g. bone marrow transplant, chemotherapy, immunotherapy
•	Oncological emergencies
•	Terminal care issues e.g. grief, loss and dying
•	Legal issues
•	Community care

These research studies have highlighted several areas of stated needs which could usefully inform the development of curricula for nurses wishing to develop their knowledge of cancer.

Further literature surrounding relatively novice nurses in this field was also explored. Johnson and Horrell (1992) outlined a study in which seven nurses were interviewed to elicit their educational needs when caring for cancer patients. The

responses provided by these seven nurses is clearly limited but centred around the area of critical thinking, communication skills and technical skills, with the result of developing individual learning programmes through preceptorship for these nurses.

Fitch and Palmer-Wickham (1993) also looked at the articulated needs of cancer nurses in Canada. However, whilst she identified that these nurses all felt they had specific knowledge deficits in the area of cancer care, no content was given and the original research is unobtainable.

Klemm and Ziegfeld (1994) discussed the needs of newly qualified nurses in their critical care oncology unit and outlined the use of a two phase workshop approach with feedback to help these nurses to orientate and develop essential knowledge and skills to reduce perceived stress in this staff group. Content included knowledge of diseases; treatment; physiology; and symptom control, with minimal input on critical care and psychosocial aspects of care.

Whilst not research based, there is a similarity in the workshop content offered by these experienced cancer nurses to their new colleagues to that described earlier. This is also corroborated in a letter by Garza (1996) who writes as a cancer nurse sharing her experience with those now in the field, urging them to gain early knowledge and skills in the areas of treatments and side effects, listening skills and an ability to hear the experience of the patient rather than their own perception of needs.

All these authors, in some way or other, corroborate the findings from the research papers outlined.

3.2.2 More experienced cancer nurses

Whilst no research studies were found highlighting stated educational needs of this group of cancer nurses, two articles (one from Canada and one from the U.K.) did pay attention to two specific groups of experienced nurses.

Fergusson (1991) reports on a survey of experienced paediatric oncology nurses. 152 questionnaires were sent, 120 returned, 92 selected which according to the author, gave a 74% response rate. These nurses were asked to outline their needs in relation to the development of the specific education content of cancer care courses. The two areas identified were those of new scientific developments e.g. genetics, treatments, and an assurance that education must be clinically relevant to their practice.

Nash (1993) developed workshops in the U.K. for experienced McMillan nurses to explore ways in which they could develop and manage their changing role. One result of these workshops was the identification by the group of future specific education needs. These fell into two categories - clinical skills e.g. treatments, symptom control, counselling skills, spiritual care and professional development areas such as research skills, teaching and management skills, standard setting and service development.

Both these papers are for discussion and information, but they highlight three important points. Firstly that there is a retained and possible greater emphasis on clinical relevance; secondly that similar content needs to be addressed but either in greater depth or in relation to updating of knowledge. Thirdly, that wider issues to do with a more senior role, may assume greater importance.

It is helpful to compare this to the three papers outlining development in cancer care and education for nurses in the UK and Europe. Oliver (1991) launched the significant RCN Standards of Care for Cancer Nursing (RCN Cancer Nursing Society 1990) which specifically addressed the way forward for uniformity of nursing care and high standard of care. It was hoped that this would lead to the identification of education and training needs for cancer nurses in the UK and in 1996 the RCN published its Cancer Nursing Education guidelines (RCN Cancer Nursing Society 1996). However, it is interesting to note that, as part of the outworking of Calman and Hine (DOH 1995), site specialist groups are undergoing a similar process whereby standards of care for cancer patients are being set and, from this, the education and training needs are being identified. Whilst many of these site specialist groups seem to be medically driven, there is a real opportunity for cancer nurses to lay the current RCN Standards (RCN Cancer Nursing Society 1990) alongside these to develop a holistic approach to care.

There is also an opportunity to do the same with the RCN Cancer Education guidelines (RCN Cancer Nursing Society 1996). At the same time as the RCN Cancer Nursing Standards (Oliver 1991) were launched, the EONS (1989) core

curriculum for cancer nursing became available. Webb and Pritchard (1991) report on this curriculum, giving its outline and a précis of how it was developed which mimicked some of the earlier research reviewed in terms of experts designing curriculum for novices. This was based on a survey by Copp (1986) and gave rise to the following content (see table 3.5).

Table 3.5 EONS Curriculum outline (Webb and Pritchard 1991)

Prevention and detection
Nature of cancer
Treatments
Care e.g. symptom control
Rehabilitation
Psychosocial aspects
Terminal care
Sociology of cancer
Ethical issues
Professional development

Following the successful launch of this curriculum, Webb (1995) followed this up by looking at the educational needs of more expert cancer nurses and described the development of courses in five knowledge areas for this group (see table 3.6).

Table 3.6 EONS Courses for Advanced Cancer Nurses (Webb 1995)

Altered body image
Emesis
Pain
Infection
Psychological disorders

These two papers are interesting in their content. They both demonstrate distinct similarities between the research studies reported on and the discussion papers reviewed. It is particularly important to note the clinical focus of the course for advanced cancer nurses, emphasising the role of the experienced cancer nurse in care and ensuring the expanded knowledge base is used to benefit patients with cancer. It is arguable, therefore, that the stated needs of nurses caring for cancer patients, whether novice or more experienced, are similar to these perceived by experts in the field, and that current curriculum and standards on offer e.g. EONS (1989) and RCN (Cancer Nursing Society 1990), are good foundations from which educators can develop their courses.

3.2.3 Summary

It has been important to look at the stated needs of nurses working in cancer prior to reviewing the body of literature around the nine key emergent themes. The stated educational needs of cancer nurses themselves provide the background to the themes identified by the research team from the literature that are deemed to be significant to cancer care education.

3.3 Key Theme One - Prevention and Diagnosis

3.3.1 The literature

The theme of prevention and detection emerges in all curricula examined and

referred to above as well in EONS (1989); RCN Cancer Nursing Society (1996) and the following 12 articles outlining curricula from all over the world. However, when searching for relevant literature around the area of cancer nurse education, few articles were retrieved (see table 3.7).

Table 3.7 Type of Literature Reviewed

Research	2
Discussion	5

The two research studies (Canel et al 1990 and Entrekin and McMillan 1993) both describe the increase in knowledge and change in attitudes of nurses undertaking educational initiatives in health prevention and detection in the area of cancer.

A USA study by Canel et al (1990) evaluated a well established three week course developed to enable community nurses to enhance knowledge and skills regarding epidemiology, role factors, signs and symptoms of common cancers e.g. breast cancer. This was followed by recommendations regarding prevention and detection using pre and post test multiple choice questionnaires. The research aim appeared to be looking at cognitive knowledge gained following the course. Whilst this might have been valuable, the course outline indicated 30 hours of theory and 61 hours of practice working with an educational facilitator. It was acknowledged by the authors that trying to evaluate outcome of education in practice was not undertaken. However much was made of the importance of the clinical experience offered in terms of applying theory to practice and yet no attempt appears to have

been made to evaluate this. Several attempts to evaluate knowledge appear to have been made using methods such as pre and post tests and observation of clinical skills with each successive cohort of students. However, considering the course has run in this format for nearly 20 years it seems surprising that no formal attempt has been made to evaluate the outcome of the course to practice.

Unsurprisingly the study reported a significant increase in knowledge gained by the students. However there was no long term follow up of candidates after a period of time.

Whilst the research design appeared limited, the content of the course makes informative reading (see table 3.8)

Table 3.8 Content of course (Canel et al 1990)

Epidemiology	}
Risk assessment	} all applied to specific cancers of
Signs and symptoms	} breast, colorectal, lung, gynaecological
Examination technique	} testicular
Prevention and detection measures	}
Legal issues	

The other interesting factor to take into account was that the students were all community based nurses (equivalent to British Health Visitors). There appeared to be no attempt to analyse the work place and therefore it was difficult to tell whether any of these nurses worked predominantly with cancer patients or had had previous educational input. However it was reported that all the students perceived health

education, prevention and detection as an important part of their role. This may partly explain the very significant increase in knowledge as motivation and interest are extremely important factors influencing learning (Maslow 1970).

This study compares and contrasts with that of Entrekin and McMillan (1993) who also used a pre/post test approach to evaluate needs of nurses in relation to prevention and detection and the impact of educational intervention on their knowledge base. Whilst a poor response rate was acknowledged and the analysis was difficult to follow, the content is of interest. This study also demonstrated that many of the nurses who worked in a variety of settings including cancer (23%) felt that their role should include health promotion, prevention and detection. Pre and post test showed little difference between the nurses working in oncology and others. Respondents were asked for reasons for not undertaking the health promotion aspect of their role, despite seeing it as important.

These included lack of:-

- time
- knowledge
- opportunity - nurses working in fields such as elderly care, paediatrics, critical care and on night duty felt it was inappropriate to be acting as health promoters.
- support for role from management

The education offered was a one week course in a variety of site specific cancers e.g. breast, prostate, lung, endometrial, consisting of both theory and practice dimensions and included the use of practice facilitators.

Content of the course included:-

- epidemiology
- risk assessment
- signs and symptoms
- examination technique
- prevention and detection measures
- legal issues

Again, despite the emphasis of applying knowledge to practice through clinical exposure, no evaluation of the effect of the educational programme on practice was undertaken.

Whilst these two studies were interesting, two areas became important to examine. The first was the length of time given in which to address the topic of health promotion. These courses are only looking at this one aspect of cancer care, and are therefore comprehensive. This issue is likely to come into each key theme, for example how much time within an ENB Clinical Skills Course (e.g. ENB 237 cancer nursing course) can be devoted to each aspect. Secondly, these two courses both emphasised application to practice. Whilst clinical skills courses demand a practice component, anecdotal evidence suggests it is becoming increasingly

difficult to place students outside their own clinical area and/or to ensure supernumary status. The ability therefore to offer such practice would be limited.

Other literature confirms the findings of these two studies through offering discussions on experience. Judkins and Boutwell (1991) outline a one week course looking at prevention and detection in breast cancer, and include identical topics to the previous studies, incorporating experience in the clinical domain. Chamberlain et al (1997) offer a similar outline for a variety of disease orientated educational initiatives looking at prevention and detection, mainly for community nurses. Practice is offered and programmes leading to MSc and research opportunities in this area are also outlined. It is therefore clear that the inclusion of clinical practice to support theoretical learning is important.

The importance of addressing issues of prevention and detection cannot be ignored. Smith (1991) suggested that cancer gave rise to a large health care need. In 1985 the European Council suggested that there needed to be a decrease in cancer death of 15% by the year 2000. In 1989 Britain funded a cancer health education initiative (Smith 1991) but in 1998 the country is still faced with the reality of the increase in cancer deaths to 1 in 3 of the population by 2009. Whilst great increases have been made in treatments and long term survival rates for some cancers, the fact remains that tertiary cancer care (hospital based) is becoming increasingly resource intensive within the UK. Whilst in the short term this will not be reduced through prevention and detection initiatives, a longer term view must be taken. This must include enabling cancer nurses to develop their knowledge and

skills to enhance their role in prevention and detection. This is endorsed by Anderson (1994) commenting on the importance of this theme in the EONS curriculum and by Jenkins (1997), who cites the increasing importance of the role of genetics in cancer prevention and detection. She suggests that cancer nurses must keep up to date with the role of genetics in disease development if they are to change health care practice for cancer patients in the future.

3.3.2. Summary

Prevention and detection are seen as important components of the knowledge base of the cancer nurse. One of the implications for the ENB is that the development of this knowledge base through education should be encouraged, with an emphasis on applying theory to practice in an adult learning approach in order to develop appropriate skills.

3.4 Key Theme Two - The Nature of Cancer

3.4.1 The literature

Whilst the literature in this area was limited, that which was considered, particularly the self directed learning packages, was extremely comprehensive. (see table 3.9)

Table 3.9 Type of literature reviewed

Research	1
Discussion	1
Self directed learning packages	2

The research study (Grant et al 1996) evaluated a short course for community hospital based nurses using a pre and post test design. The aim was to see if knowledge was enhanced, which was found to be the case. However, the response rates were poor and therefore the ability to measure change was limited. This study did not observe the effects of educational intervention on clinical practice.

The course offered was only 10 hours long but divided into three sections, the first of which was focused on the biology of cancer. Despite the apparent methodological limitations of this study, it is important to note that content of the course examined was based on students' identification of needs and there was input to the curriculum development of 'expert' cancer nurses. It could be argued therefore that this shows the importance of inclusion of this subject area within curricula for cancer nurses and this is further endorsed by EONS (1989) RCN Cancer Nursing Society (1996) and the 18 programmes outlined (see appendix three).

Almquist et al's work (1989), although limited in description and content, also demonstrates the need to include knowledge surrounding specific cancers and their biology. However, of great interest are the two self directed learning packages by

Carroll et al (1992) concerning basic cancer concepts and Tomaszewski et al (1995) concerning the immune system and cancer.

These two packages are aimed at cancer nurses, are published in American cancer nursing journals and equate in some ways to the RCN continuing education packages published in the Nursing Standard. The packages include a pre and post test and can be undertaken for credit for cancer education recognition within the USA. They both give explicit objectives surrounding topic areas (see table 3.10), and are extremely comprehensive.

Table 3.10 Topic area identified in self directed learning packages

Immune system	Cancer concepts
Biology	Skills
Function	Carcinogenesis
Components	Neoplasm
Response	Classification
Cancer	Malignant growth

They are prepared by experienced cancer nurses working in the clinical and educational fields in the USA. They demonstrate the way in which distance learning can be achieved in this area and cover the topic to an acceptable depth, giving references for further reading. These might be able to be adapted for use as self directed material for students undertaking ENB 237, 240 and other short courses related to cancer e.g. N11 or the Immune System e.g. N14.

3.4.2 Summary

Each course outline recognised the need to include this key issue as an important part of the curriculum. The literature reviewed confirms this, although literature available was limited. The learning package demonstrated explicitly the depth of knowledge needed to underpin the cancer nurses practice.

3.5 Key Theme Three: Treatments

3.5.1 The literature

This key theme incorporated the different aspects of treatment and the signs and symptoms resulting from treatment, thus giving rise to some of the aspects of nursing care in which the cancer nurse becomes most regularly involved (see table 3.11).

Table 3.11 Categories within Key Theme Three

Treatment
Chemotherapy
Radiotherapy
Surgery
Bone marrow transplant
Immunotherapy
Symptom Control
Lymphoedema
Nausea and vomiting
Fluid management
Pain
Nutrition
Oncology emergencies
Other
Pharmacology
Site specific treatment and symptom control

The literature reviewed in this theme consisted of the largest body for any theme. The type of literature is identified in table 3.12.

Table 3.12 Type of Literature

Research	9
Systematic literature review	1
Overview of programme	10
Self directed learning packs	9
Discussion papers	9

Whilst the categories within the theme are multiple, the literature obtained was far more precise (see table 3.13). 28 of the pieces of literature were from the USA; seven from the U.K. and three from the Netherlands.

Table 3.13 Literature by Category

Category	Type of literature
Chemotherapy	3 self directed learning packs 1 Research 4 Discussion paper
Pain	1 systematic literature review 7 Research studies 9 Overview of programme
Site Specific	1 Research study 3 Self directed learning packs
General Symptom Control	2 Discussion papers
Bone Marrow Transplant	1 Overview of programme
Radiotherapy	3 Self directed learning packs
Overviewing treatments	1 Discussion paper
Oncology Emergencies	1 Discussion paper
Pharmacology	1 Discussion paper

This theme will therefore be addressed using the above nine categories as sub-headings.

3.5.2 Chemotherapy

This series of papers were interesting to review due to the precise nature of the information given within them and the agreement found between them relating to knowledge base around chemotherapy that is needed by an oncology nurse. Grant et al (1996) provided the only research study in this group. The study looked at the needs of nursing staff caring for cancer patients in a community hospital (the equivalent of a British District General Hospital). Following a needs assessment of staff, a programme was devised of approximately eleven hours in length, of which eight hours were devoted to chemotherapy and nursing care (see table 3.14) A pre-

post test design was used and an increase in knowledge claimed. However, the response rate post test was poor at six months and there was little evidence of observed change in behaviour although there was a reported increase in the number of staff involved in giving chemotherapy and an increased use of supplies associated with the implementation of more rigorous safe handling techniques.

Table 3.14 Chemotherapy Course Content Outlines (most relevant)

Similarities	**Grant et al (1996)**	**Robinson and Leonard (1989)**	**Dunne (1989)**	**Creaton et al (1991)**	**Pike and Gibson (1991)**	**Lake (1991)**	**Forney and Evans (1997)**
		Classes of drugs		Classes of drugs	Classes of drugs		
	Side effects	Side effects		Side effects		Side effects	Side effects
	Toxicities			Toxicities	Toxicities		
	Safe handling		Safe handling	Safe handling	Safe handling	Safe handling	Safe handling
	Administration	Administration	Administration	Administration	Administration	Administration	
		Venepuncture		Venepuncture		Venepuncture	
			Policies	Policies	Protocols		
		Clinical			Clinical		
Differences			History	Introduction to the Haematopoetic System	Cell cycle	Ageing	
					Psychosocial aspects	Nutrition	
						Home care	

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Robinson and Leonard (1989) offered an overview of a self learning package devised as part of a change in care delivery for patients undergoing chemotherapy. Previously these patients had been scattered throughout the medical and surgical units of a large hospital. The change involved creating a chemotherapy unit and developing staff to be competent to administer chemotherapy to this patient group. The course delivered consisted of two phases: a taught component (see table 3.14 for content) and clinical experience and assessment of competence.

Creaton et al (1991) also carried out a needs assessment of cancer nurses and the highest need identified by staff was that around chemotherapy and nursing implications. This led to development of a course (see table 3.14 for content) as well as protocols and policies for future practice.

Pike and Gibson (1991), in looking to develop the extended role of the nurse in the area of the giving of cytotoxic drugs in paediatric oncology, also developed a programme (see table 3.14). Following the taught component, clinical experience and assessment were offered. The inclusion of clinical experience and assessment is common when training cancer nurses to give cytotoxic drugs and involves the assessment of competence. However, several of these papers pointed out that the assessment was only valid in their own hospital and not accepted by others. This area needs to be addressed if patients are to be able to expect seamless care. The extent to which the courses reviewed all demonstrated a comprehensive and similar content suggests that the giving of cytotoxic drugs following theoretical input and clinical assessment should be a transferable skill, not one which needs to be retaught

if a nurse moves from one job to another in a different hospital. If this is to be achieved, not only must the course content be similar, but the assessment strategy must be comparable and reliable.

The other papers reviewed in this category (Dunne 1989 and Forney and Evans 1997) concurred with the content of courses already described. The paper by Lake (1991) was slightly different in that it targeted a specific age group - the elderly - and described the development of a video and teaching package through EONS for nurses caring for elderly cancer patients in Italy (although available for general use in Europe). Whilst aspects of ageing, nutrition and home care were uppermost, the chemotherapeutic content remained the same as that outlined in other papers (see table 3.14)

Table 3.14 might then serve as the basis for the content for any ENB 237/240/N14/A11 course whereby the administering of cytotoxic drugs is a requirement/learning outcome of the course. It could also serve as the way forward for national recognition of this particular extended role.

3.5.3 Pain

This category yielded the greatest number of research studies reviewed (7) and will therefore commence with an overview of the research methodology before identifying curriculum content with regard to pain for cancer nurses.

Of the seven studies reviewed, four of them utilised a survey design looking at pre/post test acquisition of knowledge, following identification of needs by course participants. These studies did not include a control group - often for cited reasons such as limited financial resources. The debate of using a control group, either randomised or non-randomised, was not pursued in any study. However, Camp-Sorrell and O'Sullivan's study (1991) did randomise the nursing units to either an experimental educational pain programme or a control alternative programme. Randomisation might have helped to eliminate the effect of compounding variables and, along with statistical adjustment, enhance internal validity. Camp-Sorrell and O'Sullivan's study (1991) is the only one in which this was performed. Post test measurements varied in terms of when they were carried out from days to one year. Sample sizes (all but one consisting of only nurses) varied from 44 - 1200. Of these four studies, none studied the consequences for the patient. Instruments used were self developed and comment was provided on reliability and validity. Analysis varied from either testing statistics (Camp-Sorrell and O'Sullivan 1991, Janjan et al 1996) or descriptive statistics in the form of percentages (McCaffrey and Ferrell 1995; Sheidler et al 1992).

Whilst structured surveys using pre and post test questionnaires and incorporating needs analysis can be useful for investigating self identified learning needs, they run the risk of not achieving insight into the educational needs of cancer care nurses identified by a variety of stakeholders. Likewise the knowledge and attitudes claimed were not always linked to change in practice. Of these four surveys, none

included observation of practice, therefore making the results questionable and based on students own perceptions.

Two other studies utilised a different approach. Bookbinder et al (1996) used a quasi-experimental design incorporating pre and post tests, interviews, focus groups and observation. Despite some problems with validity caused by there being no control group or consideration of randomisation, the attempt at moving away from the survey is to be commended. They concluded that, through education of nurses, patient satisfaction with pain management would be enhanced if nurses knowledge could be enhanced.

The most interesting studies in this category are two by Francke et al (1996a; 1996b). Following an extensive systematic literature review Francke et al (1996c) looked at the effect of education on pain assessment and management. They undertook a two part evaluation study looking at educational intervention and enhancement of practice as a result. Part one reported in Francke et al (1996a) utilised a qualitative approach based on grounded theory. Data were collected using observation and interviews in order to identify the felt and real needs of nurses assessing and managing pain. Forty four observation hours and 25 interviews were undertaken. Whilst acknowledging the time consuming nature of this type of research, the ability to identify real needs and the methodological discussion as to whether this could be attained through the use of questionnaire and pre/post test design is interesting and thought provoking and essential to the debate on nursing epistemology.

As a result of this part of the study, a programme was designed relating to pain assessment and management for surgical nurses caring for cancer patients. Whilst reverting to a pre-post survey design, care was taken to ensure good random sampling, the use of a control group, the use of scales within the questionnaire that were already in use and therefore tested for validity and reliability and statistical analysis that was also well established. This allowed Francke et al (1996b) to demonstrate an increase in the use and quality of psychosocial intervention following education. However, once again this was not linked to observation of practice. Bearing in mind the earlier part of the study, this would have been a good way to merge the qualitative and quantitative work together. Having commented on the research methods, it is important to comment on the programmes and their content.

Again, as with the work in chemotherapy, what is striking is the obvious overlap and commonalties of content, which is both worrying and reassuring. All studies endorsed current thinking that the ability of nurses to assess and manage pain is poor. This was attributed to lack of knowledge in several areas, and thus the programmes were set up to address these areas (see table 3.15)

Table 3.15 Outline of Content - Pain

Camp-Sorrell and O'Sullivan (1991)	Sheidler et al (1992)	McCaffrey and Ferrell (1995)	Janjan et al (1996)	Francke et al (1996a and 1992b)	Bookbinder et al (1996)
Pain Assessment		Pain assessment	Assessment	Assessment	Assessment
Location		Verbal cues	Pharmacology	Pharmacology	Non-opioids
Quality		Opioids	Opioids	Psycho-social	Opioids
Pattern		Administration of analgesia	Anti-neoplastic treatment	Non-pharmacology	Non-pharmacology
Increasing factors		Prevalence		Patient experience	Patient controlled analgesia
Intensity		Addiction			Epidural
Verbal cues		Effectiveness			Algorithms
Non-verbal cues					Adjuvents
Other symptoms	Administration				
Documentation	Decision making skills				

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These programmes varied in length, and none of them offered explicit clinical experience. Other studies, as identified in Francke et al's (1996c) systematic review, were similar. This review was well conducted and reported, but has not been used extensively in this study due to the fact that, although its date parameters were between 1981-1995, the vast majority of studies included were pre 1988, the earliest date for the parameters of our study. However it is interesting to note that earlier studies were stating the same needs in terms of content and programmes. The long term beneficial effects of education and the method of education delivery need to be more closely examined if future research studies are to be able to point to cancer pain management. However, it could also be argued that the needs reflect generic areas of assessment, and that the knowledge base around these areas is constantly changing as the knowledge based surrounding the nature of cancer, treatments and the patho-physiology of pain advances. Therefore there will always be a need for education regarding cancer pain assessment and management but it is likely to become more of an updating activity for more experienced staff.

The remainder of the literature in this category contained two letters (Coyle and Adelhardt 1992; Florida Nurse 1995) which both state that cancer pain assessment and management is poor and suggest areas such as assessment, administration, pharmacological and non-pharmacological interventions as topics for inclusion in nurse education. McMenamin et al (1995) also comment on similar educational needs and content and call for research to link educational initiatives to observed change in practice. Portenoy (1992) outlines the same perceived lack of knowledge in all health care professionals, particularly doctors, and suggests that the same

content for education is needed across the board. This could give rise to work demonstrating the need for interprofessional education relating to pain assessment and management for cancer patients. Two papers outline short programmes on specific aspects of pain (Burke and Ellis 1995 on assessment and Carter and Martz 1995 on pharmacology). A further two papers give a very comprehensive overview on long programmes (1 week plus) Ferrell et al (1993), Dalton et al (1995) and the Ad Hoc Committee on Cancer Pain of the American Society of Clinical Oncology (1992) share their very comprehensive learning outcomes for developing a knowledge base regarding pain assessment and management at expert nurse level (see table 3.16). These two longer programmes, as with chemotherapy, are indicative of the time and content needed to achieve a good knowledge base.

As examined earlier, it is important to look at learning outcomes achievable at a variety of levels of learning and a variety of levels of practitioner. To use Benner's levels (Benner 1984), the novice oncology nurse could be argued to need introductory workshops on a variety of essential topics linked to a preceptorship programme.

The competent oncology nurse could be enabled to achieve this level through undertaking an ENB Course either general e.g. ENB 237 or specific e.g. ENB N14. However, the length of time these courses are delivered in and the number of learning outcomes to be achieved preclude in depth knowledge of any one subject. Rather, they enable the cancer nurse to develop an awareness of the complexity of cancer nursing.

Table 3.16 Content of long programmes

Ferrell et al (1993)		Dalton et al (1995)
Pain - attitudes	C	Pathophysiology
Anatomy and physiology	L	Assessment
Assessment	I	Surgery
Pharmacology	N	Pharmacology
Surgery	I	Non-pharmacology
Non-pharmacology	C	Psychosocial
Ethics	A	Ethics
Spiritual care	L	
Cultural care		
Psychosocial care		
Patient education		

The proficient/expert cancer nurse is likely to specialise in an aspect of cancer nursing linked, for example, to the clinical specialist role, and to develop a deep understanding of that particular aspect. These nurses require in-depth courses to help meet their needs around this aspect as well as time to update in a variety of ways.

This category has given rise to a variety of interesting issues. However, as with the chemotherapy category, a clear picture of likely content has emerged for a variety of courses, whilst begging the question of the depth of engagement that may be achieved with the content in a given length of time.

3.5.4 Site Specific

The number of papers in this section was limited (four) and the sites were limited (breast, three, gastrointestinal tract, one). The research study by Alexander (1990) used a quasi-experimental design, collecting data through questionnaires and interviews with nurses (n=33) and questionnaires with patients (n=18). A control group was set up in the patient group but not for the nurses. Whilst this is a simple study using reliable scales and trying to measure outcome on patients, it adds little to the literature review apart from suggesting that specific education relating to breast cancer enhanced patient care and there is no overview of the content of the education, therefore making the report limited.

Three other papers do give greater clarity concerning educational content. Casey (1989) looked at education needs of surgical breast care nurses caring for mastectomy patients and outlined a course with specific content to meet their needs. Chaplin's (1996) self directed learning package on breast cancer is also useful although limited (see table 3.17).

Table 3.17 Comparison of content

Chaplin (1996)	Casey (1989)
Incidence	Self examination
Pathology	Diagnosis
Epidemiology	Treatment
Risk factors	Nursing care
Tumours	Caring strategies
	Patient information

Similarly a Nursing Times Supplement (Nursing Times 1995) learning pack regarding gastrointestinal tumours contains similar site specific content and is limited.

Whilst it is difficult to draw many conclusions from these papers, an outline of common content is given which tallies with that of those seen in the EONS (1989) curriculum and those of the eight countries explored earlier (see appendix 3).

3.5.5 Radiotherapy

Three self directed learning packages are presented here (Dunne-Daly 1994a, 1994b, 1994c). These seem applicable for cancer nurses wishing to gain a basic understanding of radiation therapy. It must be noted that these are written for an American audience, but they provide a good introduction commensurate with that given in e.g. ENB 237/240, and provide excellent further reading. They also tie in with suggested content from the EONS curriculum (1989) and those of other countries (see appendix three)

The content includes

1. External Radiotherapy - Introduction and history
   Goal of treatment
   Physical effects of radiotherapy
   Administration

Effects on the cell

Process of radiotherapy

2. Nursing Care - Patient education

Myths and misconceptions

General skin effects

Nutritional impact

Fatigue

Bone marrow suppression

Site specific effects

3. Brachytherapy - Introduction

Radioisotopes

Half life

Sealed and unsealed sources

After loading

Radiation safety

Whilst all three packages are now slightly dated, they provide the basis for content of a course and could, if amended and anglicised, be useful for reference for student directed learning prior to or during a course.

3.5.6 Symptom Control

Whilst chemotherapy as treatment was well addressed, side effects from both treatment and disease (apart from pain) have been surprisingly absent in the

literature.

Hogan (1997) provides a comprehensive overview of side effects.

Nausea and vomiting	Fatigue
Anorexia	Taste changes
Constipation	Diarrhoea
Anxiety	Skin breakdown
Sleep disturbances	Menopausal symptoms
Mucositis	Sexual dysfunctions
Incontinence	

This overview is echoed in each outline curriculum. (see appendix three) Whilst much is written about some of these symptoms, for example nausea and vomiting, research into nursing care has been limited until recently. An emesis package (Hawthorn 1991) was produced in recognition of the fact of limited educational resources available for nurses caring for cancer patients with this specific symptom and it is hoped that others will follow. However, what is not indicated but is partially explored by Hogan (1997) is the effect these symptoms have on the quality of life for the patient. Little mention is given within this or the second paper reviewed (Almquist et al 1989) as to the impact of symptoms within the experience of the patient with cancer.

Much recent literature (not necessarily in the field of cancer) has explored the illness experience through the use of metaphor, narrative and phenomenology. Whether this content is included in current courses is difficult to tell. However analysis of themes four and five (psychosocial aspects of care, and rehabilitation and

survivorship) may provide some answers. The difficulty of knowing to what depth content should be explored at what level may preclude content of this nature being included within an ENB course. However, it cannot be ignored if holistic care is to be achieved.

3.5.7 Bone Marrow Transplant

Only one curriculum overview is presented for review in this category (Kelleher 1994). Whilst slightly dated and North American, it provides an extremely comprehensive overview of content which could be used, for example, within ENB N14. As malignant haematology and transplant treatments continue to expand through advances in knowledge and technology, so these more specialist courses are likely to become more necessary. It is therefore important to ensure comprehensive, up-to-date programmes are provided.

3.5.8 Overview of treatment

All curricula reviewed (see appendix three) cite the variety of treatments for inclusion in cancer care courses. Krohner and Speitak (1992) endorse this by concurring with earlier work decrying the lack of cancer nursing content in pre-registration curricula and the need to address this through continuing education. As a result of this they describe the inception of an educational steering committee set up in their hospital and outline the modules developed by this committee. Three of these are cancer treatment orientated - chemotherapy, radiation and surgery and

inc'ude information relevant to treatment, nursing management and psychosocial support. They use case study and include clinical exposure. The paper demonstrates the need for nurses to receive input into the variety of treatments offered to cancer patients.

3.5.9 Oncology Emergencies/Critical Care

All curricula reviewed (see appendix three) cited oncological emergencies as an important topic for inclusion. This was sometimes broken down into specific content e.g. septic shock, tumour, lysis syndrome, dissemination intravascular coagulation, hypercalcaemia, anaphylaxis. However, none of them mentioned the care of cancer patients within the critical care setting. Yet as one paper in this category outlines (Dickinson 1990), this can be a difficult area in which to consider care. Very few critical care nurses will have undertaken any form of continuing education around issues of cancer care, yet a small but significant proportion of their workload will concern patients with cancer. This paper suggests there is a need for critical and intensive care staff to be aware of new treatment protocols which may result in patients with cancer being admitted to an intensive care environment.

However, the literature generally suggests that there is also a need for cancer nurses to be familiar with high dependency and intensive care for cancer patients. With newer treatment regimes and the technology to implement these, together with a greater emphasis on shorter hospital stays and community care, inpatient care has

become more acute in nature. There is therefore a need to incorporate content relating to oncology emergencies and high dependency and intensive care, as well as psychological care for patients and families, during transfer from the cancer environment to the critical care environment.

3.5.10 Pharmacology

All curricula reviewed (see appendix three) drew attention to pharmacology in relation to treatment and symptom control. Only one letter (Bynoe 1992) was found explicitly stating that keeping abreast of pharmacologic information is a challenge for cancer nurses due to the vast number of drugs associated with the treatment modalities. The letter included a word search exercise as a creative way of helping oncology nurses learn around this topic area. Whilst one could make an assumption concerning the amount of pharmacology required in an oncology programme, this needs to be explored within the documentary analysis to see if this category could be further elaborated upon.

3.5.11 Summary

This key theme of treatment contains many sub topics. The type of literature available concentrated upon research studies and self directed learning packs, with many descriptive overviews of programmes around pain and chemotherapy. This concentration on these two areas reflects the nature of current cancer treatment and the emphasis on symptom control. The emphasis is also present in the

documentary analysis of cancer care educational programmes reported in the next chapter.

3.6 Key Theme Four: Psychosocial Aspects

3.6.1 The literature

Within this theme it is important to explore the historical perspective in terms of the importance given to this aspect of care as this is a relatively new area of cancer care. This section will therefore commence with an overview of curricula from 10 countries with regard to the amount of psychosocial weighting given. This will be compared to that of the EONS curriculum (EONS 1989); the RCN guidelines (RCN Cancer Nursing Society 1996); the Calman and Hine report (DOH 1995) and issues identified therein. The literature will then be reviewed to enable an outline of content to be obtained.

Curricula from 10 countries were obtained (see table 3.18) and analysed for psychosocial content. Various issues immediately became apparent.

Table 3.18 Countries that produced curricula with dates

Spain	1988
Canada	1988, 1995, 1996
Switzerland	1988
International Union	1990
South Africa	1992
Japan	1994
Poland	1994
Spain	1996
Hong Kong	1997
Middle East	No date

Firstly, countries describing these as the first courses ever run (Hong Kong, Japan, Middle East) contained limited or no psychosocial aspects within their curricula. They all expressed a need to concentrate on the basis of cancer and treatment, for example chemotherapy, and were aimed at nurses who had undertaken little or no other cancer education and either worked with cancer patients in general medical/surgical wards where there was no specialist provision, or were being provided alongside the move to specialist provision.

Secondly, all Canadian and American courses, irrespective of date, were heavily psychosocially weighted. Thirdly, a slight trend across all courses was noticed whereby more psychosocial input was seen in the more recent courses.

Fourthly, the courses that offered the highest rate of inclusion of psychosocial aspects e.g. Poland and Canada, were aimed at more advanced oncology nurses, thus describing the other end of the spectrum to point one.

When comparing this to the EONS curriculum (1989), it is important to notice that psychosocial aspects of care are included but as a small portion of the whole. Bearing in mind that this curriculum was designed to meet the needs of nurses working in Europe, the differing countries will determine the balance appropriate to their own cancer care education needs in their interpretation of these guidelines. Therefore it is suggested that those countries where nurses were already exposed to elements of cancer education, for example, Britain, may be more likely to include elements of psychosocial care.

More recently the Calman and Hine report (DOH 1995) has placed greater emphasis on a patient centred approach, good communication between professionals and patients and recognition of the impact of cancer, resulting in consideration of psychosocial aspects of care. Furthermore, it is recommended that nursing care should be planned and led by cancer qualified nurses with expertise in a variety of areas including counselling and psychosocial support. This education is seen as post qualifying and at two levels specialist and advanced. The RCN Guidelines for Cancer Nursing Education (RCN Cancer Nurse Society 1996) also endorse the inclusion of psychosocial care at all levels. If psychosocial care is now seen as more important, it is important to consider the literature connected within this theme (see table 3.19).

Table 3.19 Types of Literature Reviewed

Research	2
Programme Overviews/Curricula	8
Discussion Papers	3

The main research paper (Heaven and Maguire 1996) outlines a pre-post test design assessing skill levels following an educational intervention, specifically communication skills for cancer health care professions (mainly nurses). The researchers used valid, reliable and well known scales to collect their data and paid good attention to detail in their statistical analysis. The sample size was small and reduced significantly within the data collection process from 44 to 22 nurses. Improvements in skills were reported by the respondents, however these were neither observed by the researchers nor validated by patients. It is therefore difficult to know whether course participants' perceptions of the enhancement of their own skills was benefiting patients. The content of the educational intervention was outlined and one outcome was the need to lengthen the course in order to broaden the topic areas and therefore do justice to the subject.

Other literature reviewed reinforced the importance of the course outlined in Heaven and McGuire's (1996) work, although the depth varied due to length of time of the course and target audience. However, a clear picture emerged of the core content required and the fact that this would be at one level for newer cancer nurses and need to be built upon if the nurse was to progress toward specialist/expert status. Another interesting factor was that several of the courses outlined were aimed at an interprofessional audience.

Wettergren (1996) suggested that psycho-oncology was a new dimension in Swedish nursing and outlined an interesting seminar programme for nurses. This looked

explicitly at the concept of the patients' journey and used psychodynamic theory to look at enhancing counselling skills in a variety of settings for example breaking bad news. She also emphasised the need for nurse support if psychosocial care was to be adequately addressed, recognising the stress placed on nurses when exploring issues with patients.

Meek and Pietroni (1993) outlined a similar approach to education, using the patient's journey and psychodynamic theory as a framework. However, they describe a very advanced course aimed at experienced and knowledgeable cancer health care professionals. They appear to offer the only reported programme to included the patient and family - a significant change in education approach and in keeping with Calman and Hine (DOH 1995).

Maguire and Faulkner (1988) outlined a workshop approach around issues of breaking bad news and assessment of patients, and looked at developing specific communication skills e.g. questioning and listening as a means of developing staff. These workshops were further developed by Parle et al (1997), looking at knowledge, skill and attitudes and also including staff support.

Wilkinson and Roberts (1997) have outlined their research into a similar process using a pre-post test design. However, at the time of this project the original study and findings were not available.

Renwick (1992) used a case study approach to identify questioning, listening and summarising as the key skills needed by staff fairly new to cancer care. This was endorsed by Oliver (1994) in her self directed learning package, where nurses are encouraged to look at the impact of cancer on the patient, family and nurse, and assess their communication skills, knowledge, beliefs and attitudes in order to develop in this area.

Interestingly, all literature reviewed in this section, with the exception of Wettergren (1996), originated from the UK, and dates predominantly from 1992 onwards. This shows the emergence of importance of psychosocial aspects of cancer care within the UK. Other literature from the USA and Europe is outlined below.

In 1994 the conference proceedings from the Oncology Nursing Society Forum Annual Conference (ONS Fall Institute 1994) showed that psychosocial aspects took up one eighth of the whole conference, and were comprehensively being addressed through research.

Yaniv (1994) addressed the specific aspect of sexuality and offered a programme for senior oncology nurses looking at knowledge, skills and attitudes, counselling skills and assessment. This paper was the only one to explicitly address sexuality issues within education. She found that those nurses who were motivated to improve their communication skills in this area were likely to do so and this led her to question the need to develop all versus a few nurses.

Die-Trill and Holland (1995) outlined an extremely comprehensive curriculum for an interprofessional course of one year, with an option to progress through research in the second year. The content included medical factors and psychology, psychiatric disorders, ethical issues and psychological research methodology. Whilst extremely comprehensive, the aim was to develop advanced practitioners and the depth and complexity of the programme plus the research emphasis endorsed this.

The last two papers took a specific aspect of psycho-oncology (King et al 1997 - quality of life; O'Connor 1996 - ethics and morals) and looked at these from a clinical perspective, in order to explore the issues. They both called for the inclusion of these topics in oncology nursing education, and the literature so far supports the paucity of these topics in current educational curricula.

3.6.2 Summary

The literature reviewed demonstrates the importance of psychosocial aspects of care to be included in cancer nurse education. However two distinct levels of knowledge have emerged. Table 3.20 outlines the common core content that could be addressed within ENB cancer care courses at undergraduate levels.

Table 3.20 Suggested common core content for undergraduate cancer care courses

Communicating and Counselling Skills	- questioning
	- listening
	- summarising
Specific Topics	- breaking bad news
	- angry patients
	- denial
	- coping strategies
Staff Support	

Table 3.21 outlines the content seen in more advanced courses, and it is suggested that this is more likely to be applicable at a post-graduate level, and may suit an interprofessional audience.

Table 3.21 Suggested content for post-graduate cancer care courses

The patient's journey - chaos, diagnosis, recovery, treatment, disorientation, survival/death
Uniqueness of the individual
The meaning of illness
Psychodynamic theories
Ethics
Cultural and social issues
Psychiatric disorders
Research methodology

The emergence of psychosocial aspects of cancer care in the UK and Europe is important as it demonstrates the move from an empirical, medically dominated paradigm, to a qualitative paradigm incorporating different philosophies. Whilst the

empirical paradigm has been very important in cancer research in order to develop treatment and move toward improved long term survival rates, this is now leading to the need to understand the patient's experience or cancer journey in its individuality, and an attempt to address the quality of life issues that this generates. The inclusion of psychosocial aspects of care in cancer nurse education is therefore imperative.

3.7 Key Theme Five: Rehabilitation and Survivorship

Calman and Hine (DOH 1995), the RCN Guidelines for Cancer Nursing Education (RCN Cancer Nursing Society 1996) and the EONS curriculum (1989) all comment on the need for rehabilitation services and the nursing role within this is highlighted. The area covered within this theme included exploration of the late effects of treatment in the patient, re-ordering of life story and supportive therapies. Yet despite the burgeoning generic literature around the areas of rehabilitation and survivorship, no articles were found specifically relating to the inclusion of this aspect within cancer nurse education. The vast majority of outline curricula did not mention this theme within them although one from the Middle East identified late effects as important, one from the USA mentioned rehabilitation and one from Hong Kong recognised a need to explore the area of survivorship within any future courses. This theme will be revisited following the documentary analysis.

3.8 Key Theme Six: Death and Dying

3.8.1 The literature

In 1994 Webber stated that research to guide practice and education was only beginning to emerge in the area of palliative care, which had delayed the development of curriculum. Content and learning outcomes were seen to be difficult to identify and cost benefits of any education were lacking. Webber (1994) identified two areas in which research was beginning, which correspond fairly well to the literature review within this section (see table 3.22). They were:

- problems experienced by nurses caring for patients with a poor prognosis
- identification of knowledge base and competencies

Table 3.22 Types of literature reviewed

Research	10
Reviews	6
Discussion	1
Overviews	13

Many of the research papers fall into the latter category. A third category which is often talked about but little demonstrated is outcome studies. Webber (1991) undertook an evaluation study using a qualitative approach to gain insight into students perceptions of the value of education in palliative care. This is the only study evaluating this aspect and she found that competence, empowerment, self

awareness, self acceptance and advocacy were all perceived as being enhanced following education. One interesting aspect of this study was the use of critical incident analysis and the attempt to integrate practice issues into the research. However, no attempt was made to collect data from the students' peers/managers or patients in terms of corroborating these perceptions. Frommelt (1991) used a quasi-experimental approach to look at the impact of education following a two hour workshop. A pre/post test design was used immediately prior to and after the workshop. The findings suggest great improvement in knowledge base. However, the sample was small (n=34), no control was included and there was no attempt at longer term follow up.

Knight and Knight (1992) undertook a Delphi Study to identify needs of nurses working in palliative care. They had a sample of 16, who identified a variety of topics for future inclusion in courses (see table 3.23). However, the study was small scale and would not have been replicable.

Table 3.23 Outline of Course Content - Palliative Care

Knight and Knight (1992)	Jeffrey (1994)	Gibbs (1995)	Sellick et al (1996)	Redman et al (1995)	
			-		Practice based
*	*	*	*	*	Pain
	*	*	*	*	Symptom control
*	*		*		Counselling/ communication skills
					Death
					Dying
*	*				Bereavement
*					Loss/grief
*					Ethics
					Legal issues
*					Hospice philosophy
*					Spiritual care
	*				Therapies
					Societal issues
					Feelings
			*	*	Staff support
			*	*	Stress management
	*				Dying child

Jeffrey (1994) undertook a survey to identify needs of community nurses for education in this area. Whilst several common areas were identified (see table 3.23) the analysis was descriptive and the sample small.

Gibbs (1995) looked at needs of nurses working in the elderly care setting. Although the sample size was very small, the data were collected through a questionnaire undertaken within an interview and included case history and problem solving. He identified two areas of educational needs (see table 3.23), but more importantly identified a large group of nurses working in the private/independent sector who were not being catered for.

Redman et al (1995) also used a survey design to identify key needs of nurses working with dying people. The use of questionnaire and telephone interviews was useful. The sample was of a reasonable size (n=108) but again, descriptive analysis was weak. Four areas were identified (see table 3.23).

Sellick et al (1996) used survey design and incorporated one focus group. The survey was undertaken on a convenience sample of 146 and the focus group utilised 22 from the original sample. The analysis was well addressed and a variety of needs emerged (see table 3.23).

Patterson et al (1997) undertook a pilot study trying to identify needs, barriers and educational format using a survey approach. Descriptive analysis identified some needs but the final study which may throw further light on the topic, is not yet available.

Other studies looked at educational methods for the delivery of education in this area. Faulkner (1992) aimed to identify methods but the study was limited in its results. Andrew (1996) used an ethnographic approach, collecting data through researcher journal, interview, questionnaire and field notes plus 'conversational' data, which the reader has to assume was collected in the field notes. Whilst this led to an argument for reflection as a teaching strategy, the lack of evident triangulation of data and paucity of discussion into research bias means that the information needs confirmation from other sources prior to adopting this as a strategy. However, several of the earlier studies (Jeffrey 1994; Knight and Knight

1992 and Sellick et al 1996) demonstrated a desire to develop an education programme that would be appropriate to incorporate other professions, not just nursing.

Alongside these research studies was a plethora of useful papers, all commenting on curriculum design and needs assessment.

Three reviews (Copp 1994; Doyle 1991; Sheldon and Smith 1996) offered some useful overviews. Doyle (1991) looked at identification of needs, but was superseded by Copp (1994) whose reviews endorse the fact that crucial behaviours associated with nursing dying people needed to be identified before education could be valuable in enhancing practice. Copp (1994) also looked at ways in which teaching might be approached and questioned early studies where claims had been made that education had enhanced practice. She questioned whether this could be explicitly due to the educational content or whether the opportunity to discuss sensitive issues was equally responsible for the results of a variety of surveys. However, she did endorse reflection as a method of teaching which may be beneficial.

Sheldon and Smith (1996) looked explicitly at a new approach to searching and research using a human inquiry philosophy. Their paper suggests that palliative care needs to be taught through utilising the students' experience within an interprofessional forum where students and teachers learn together through inquiry.

Webber (1994) gives a useful overview of the variety of nurses accessing courses of this nature. She suggests that at pre-registration level or for newly qualified nurses courses should look at building confidence and skills. It could be suggested that this equates with ENB 931. The second level is for more experienced nurses and should deal with issues such as pain and symptom control, specific interpersonal skills and be offered to nurses caring regularly for dying patients. Academic level should be at Diploma/BSc and this may equate to ENB 285. The third level should incorporate aspects of change management, policy and standard setting, use of resources and be set at MSc level for clinical specialists and managers. This was reinforced in a more recent paper (Weber 1997). These papers drew on the International Society of Nurses in Cancer Care (International Society of Nurses in Cancer Care 1990) outline curriculum for palliative care, which suggested two levels of education, one for generalist and one for specialist. Babcock (1990) also identified two levels of practice and therefore education in his outline curriculum. Whilst one or two other papers outlined specific areas of care, for example Clingerman (1996), regarding spiritual care for students thorough art therapy and memorial services and Piles (1989) through a Christian ethos of caring, the vast majority of literature echoed the content of each other as outline curriculum (Boswell 1997; Chambers and Haughey 1993; Cohen et al 1988; Faulkner 1996; Hopkins and Field 1997; Qvarnstrom 1988; Ragho 1995; Smith 1996). It should be noted that much of the literature in this theme is more recent than in other themes, and that over two thirds of the literature was from the UK. This results from the development of the hospice movement and palliative care as being areas of specialist practice that originated in the UK.

3.8.2 Summary

Whilst there are research needs in this area, it is recognised that the impact of education on patient care outcomes needs to be discovered if education into death and dying is to be effective. It is also clear from the literature that this theme is needed to be explored at a variety of levels depending on both the experience, the area of practice and the role of the nurse. However, a comprehensive topic list has been generated by the International Society of Nurses in Cancer Care (1990) and Babcock (1990) which appears to remain relevant and comprehensive as well as utilised. It is suggested that, whilst research continues, educators continue to use these sources, as well as to look at teaching and learning methods and how this may be adapted to the needs of death education.

3.9 Key Theme Seven: Organisation of Care

3.9.1 The literature

This theme looked specifically at organisation of care and the nurses' role within this. (See table 3.24 Overview of the literature)

Table 3.24 Overview of the literature

Research papers	0
Discussion papers	10
Country of origin	USA 1
	UK 9

The papers were interesting as they fell into two groups - pre and post Calman and Hine (DOH 1995).

3.9.2 Pre Calman and Hine (DOH 1995)

Five papers were identified that mainly looked at the way in which cancer nurse roles were incorporating extended roles, and the nurses' perceptions of these roles. (Dool et al 1993, Kalnins et al 1994, Taylor 1988). Other aspects of nursing roles such as involvement in clinical trials (Wheeler 1991) and teaching (Luketich 1991) were also explored. In all of these papers the need for education for the specific role of the cancer nurse was identified.

3.9.3 Post Calman and Hine (DOH 1995)

Calman and Hine (DOH 1995) introduced a new, comprehensive approach to organisation of cancer and palliative care services, resulting from the need to develop a seamless uniform approach to care throughout England and Wales. The role of the nurse within the Calman and Hine document is often not referred to, apart from three key areas:

1. The need for specialist nurses with appropriate post-qualifying education.
2. Site specific specialist nurses.
3. Skill specific specialist nurses.

Four key documents relating to Calman and Hine and the role of the nurse have since been published for consideration.

Corner (1996a) discussed the role of nursing following a conference in which it was apparent that nursing was being paid scant attention to, regardless of the fact that she suggests that the initiatives for cancer services will be seen to fail if nursing is not recognised as the lynch pin of the future service. However, Corner (1996a) also recognises the enormous education need if there are to be enough appropriately qualified nurses to develop cancer nursing in the future.

Cooper and Pemberton (1996) endorsed the facts about the lack of qualified cancer nurses, particularly if part of their role is to educate others. However, Cooper and Pemberton (1996) also identified other key areas for cancer nurses in the future. These included health education, outcome monitoring and community nursing roles. They recognised that cancer nurse education would need to endorse communication skills, evidence based practice and psychosocial aspects of care if expertise was to be developed. They also acknowledged the need for support mechanisms for cancer nurses.

Closs et al (1996) and Closs et al (1997), through presentation of one district's outworking of the Calman and Hine report (DOH 1995), concurred with the above and demonstrated the enormity of the task they faced in preparing nursing to meet the needs of the cancer patient within the organisation of care model proposed. They specifically outlined the need for clinical nurse specialists and key nurse

development posts, as well as calling for a multi-disciplinary team work approach to care.

3.9.4 Summary

The provision of cancer care is planned to change in line with Calman and Hine (DOH 1995). Nursing roles need to be developed along key lines of site specific and skill specific areas as well as within acute and community care settings. The need for cancer education was well outlined and the difficulties of resourcing this described with regard to time, clinical placements and funding.

Familiarisation of nurses with the Calman and Hine report (DOH 1995) is on-going in order to work towards the changes. It is important that nursing roles are developed within this framework and that education is provided at different levels to meet these changes.

3.10 Key Theme Eight: Key Skills

3.10.1 The literature

Four relevant articles were reviewed in this section, all discursive in nature. The key skills being sought were related to thinking and the utilisation of evidence based practice, as well as those related to the wider role of the nurse e.g. teaching and management. Greenslade (1991) looked specifically at the art of nursing and based

her discussion around the ability of the nurse to be 'with' patients, demonstrating caring. She suggested that the experienced nurse demonstrated skills of data gathering, creativity, questioning and intuition all based on knowledge and experience i.e. know that and know how. Fitch and Thompson (1996) concurred with this and stated that regardless of the nature of a decision regarding care, the decision could only be as good as the data on which it is based. They suggested that, by utilising skills of critical analysis, questioning, literature reviewing and evaluation, the scope and strength of professional practice would be enhanced. Graydon et al (1993) discussed the need for evidence based practice utilising critical analysis and evaluation skills. They suggested that lack of awareness, lack of support, lack of collaboration and peer evaluation skills all acted as barriers to evidence based practice.

Gullo (1997) took all these skills and suggested that the experienced cancer nurse (and by this she was looking at those 'practising' at MSc level should have developed four areas of the role - teaching, caring, research and management. Within these roles the nurse needed to demonstrate good critical thinking and questioning skills, be visionary and be initiating change management in order to enhance quality of care. Whilst much is being written about the development of key skills such as analysis and evidence based practice, the literature for cancer education was limited. However, it was clear that the role of the cancer nurse changed and developed with time and the development of knowledge and expertise. These roles are seen as similar to those of the clinical nurse specialist. There is a need to look at the concepts of specialist and advanced practitioner in terms of

academic levels to determine where the graduate and the post graduate qualified nurse are placed. With more emphasis on an all graduate profession in the future, these concepts need clarifying.

3.10.2 Summary

Key skills were identified such as questioning, listening, critical analysis and evaluation. Evidence based practice was also seen to be important but it was recognised that this would only be developed through the use of key skills.

3.11 Key Theme Nine: The Future of Cancer Care and Education

3.11.1 The literature

This theme generated 27 articles for review and was divided into two categories (see table 3.25)

Table 3.25 The Future of Cancer Care and Education

Nature	Number	Type
Future of Cancer Care	10 (9 USA, 1 UK)	Discussion
Advanced Practice	17 (13 USA, 3 UK, 1 Canada	1 literature review 16 discussion

Category 1 Future of Cancer Care

When reviewing the literature in this category two factors became very apparent. Firstly, all, apart from one paper, was from the USA. Secondly, of the nine from the USA, five were from the same journal in the same issue, a series on the changing face of cancer care in the 21st Century and five papers included McCaffrey Boyle as sole or contributing author. Whilst McCaffrey Boyle is well recognised as an international contributor to cancer nursing, it would be dangerous to base the view of the future of cancer nurses on one person's work. However, these insights are important and interesting and are therefore reviewed in this section.

The series of articles on the 21st Century and Cancer Care (Engelking 1994; Harvey 1994; McCaffrey Boyle 1994; McCaffrey Boyle et al 1994a; McCaffrey Boyle et al 1994b) all contain the same themes which can be covered under the future of cancer services and therefore the implications for cancer nurse education.

The future trends for cancer services is outlined in table 3.26.

Table 3.26 Cancer Care in the 21st Century

Increasing elderly population
Increasing female population
Increasing ethnic diversity
Increasing poverty
Consumerism
Ambulatory and home/community care
Increasing technology/multimedial treatment
Critical acute care
Cancer as a chronic illness
Evidence based practice
Increased ethical dilemma

The implications for nursing education are vast but it is suggested that courses in the future will develop to follow the above trends.

Furthermore, advanced courses for the new leaders of cancer nursing will need to include the skills of:-

- Consultation, collaboration and team work
- Economics and business
- Leadership development
- Quality assurance
- Budget management
- Critical thinking
- Decision making

and be based on a philosophy of life long learning.

These key elements of the future were also endorsed by McLaughlin-Hagan and Baird (1993), Nelson (1995), and Haylock and McCaffrey Boyle (1995), with a heavy emphasis on the prevalence of cancer in the 21st century, with treatment characterised by critical acute episodes and an emphasis on chronic illness and rehabilitation in the home/community care setting. Whilst this is all seen from the USA perspective there are many similarities with the UK. The US have developed their ambulatory care more quickly than in the UK but the interface between hospital and community has been encouraged in the UK since the early 90s (community care act) and is endorsed by the Calman and Hine report (DOH 1995).

Prevention and early detection are playing a greater role within cancer care in the UK and genetic advances are being echoed by technological advances. Elderly oncology is not yet seen as a speciality but is likely to be in the future as the age of the population with cancer continues to rise.

The suggested implications for cancer nurse education are likely to be absorbed in the UK as cancer care changes in the 21st century. A paper by Jodrell (1996) looked at the needs of Scotland and Scottish nurses in terms of cancer care. Whilst it did not focus on the above themes, there was a distinct concern at the lack of cancer educated nurses in Scotland which was reflected by Corner (1996b) when looking at England and Wales.

The ability to develop cancer nursing alongside cancer care will be hampered by the lack of skilled, knowledgeable cancer nurses in the 21st century. This needs to be addressed urgently if Calman and Hine (DOH 1995) stands a change of succeeding.

Category 2 Advanced Practice

The literature reviewed was predominantly from the USA. This gives a dilemma for the UK audience as the education system is vastly different. It is therefore clear that all courses developing advanced practice are set at Masters level in the USA, and that this often equates to the Clinical Nurse Specialist (CNS) role here in the UK. This gives rise to questions regarding the skills acquired and to what level should the CNS be educated. The literature did however give clear insight into the content of courses aimed at the advanced practitioner, with an outline of the role.

Early writings (Bakke 1992; Fenton 1992; Hagopian et al 1992; Paice and Cohen 1991; Whitley 1992) all outlined areas such as collaboration, education, research and consulting as fundamental for advanced cancer nurses. In order to achieve this, it was suggested that education should be largely clinical and should include preceptorship and membership as the main facilitation modes.

By 1993, Lathrop and Otte (Lathrop and Otte 1993) were beginning to suggest content for curriculum for preparation of advanced cancer nurses and over the ensuing years this has been further identified and refined (Belcher and Shurpin 1995; Brown and Hinds 1996; Jacobs and Kreamer 1997; McGuire 1997; Nelson-

Marten et al 1997; Rosenzweig et al 1997). Content remains similar to that outlined under category one, with an increased emphasis on key skills such as

- self reliance
- systems thinking
- leadership
- research
- decision making

All the above are derived from USA papers advocating Masters level preparation. Papers from the UK and Canada take a similar approach but address a wider range of academic levels. Kelly (1994) suggests that the starting point is acquisition of knowledge and skills around the areas of communication, technical aspects and treatment. This can then be enhanced by the development of a theoretical base, and further developed through a wider perspective at Masters level to include ethics, economics, management and collaboration.

Flaherty (1993) outlined a course in Canada for the development of knowledge for oncology nurses. This was perceived as the beginning point of education and no level was endorsed. However, Fergusson (1991), in her literature review, does point out that there is a need to evaluate the outcome of many courses at a variety of levels prior to calling for education at a set level, linked to levels of practice. This would seem valuable if the cost of education is to be justified particularly when calling for so much of it at present.

3.11.2 Summary

This theme has focused on the future of cancer services and education into the 21st century. Currently advanced practice in cancer nursing is predominantly described in terms of Masters level courses set within the USA. New trends in care, also in the USA literature, do indicate the need for a shift of emphasis in topic areas in courses designed for the future cancer nurses. It is therefore important to work these into any future national cancer education curriculum if the cancer nurse is to be able to meet the needs of the cancer patient in the future.

In the UK there is also a need to refine and establish the roles of specialist and advanced practitioner. The academic key skills needed will then determine at what level education should be set to achieve this.

3.12 Teaching Models and Strategies

3.12.1 The literature

Whilst undertaking the literature review, several pieces of literature were discovered relating to the way in which education for cancer nursing could be enhanced (see table 3.27).

Table 3.27 Literature reviewed

Research	1
Discussion	12

It seemed important to share the progression of these and they are tabulated to used as reference where useful.

Origin	Author	Strategy/Model
UK	Lake (1991)	Distance learning through video
USA	Daly and Erdmann (1988)	Literature searching
USA	Nielsen (1989)	Andragogy
USA	Smith et al (1991)	Outreach/distance learning
USA	Slaninka (1992)	Experiential learning
Canada	Muscari Lin et al (1993)	Self directed learning
UK	Bassett (1994)	Open learning
Canada	Czechmeister (1994)	Use of metaphor
Netherlands	Francke and Erkens (1994)	Confluent education
UK	Mountford and Rogers (1996)	Reflection
USA	Gressle and Meier (1997)	Questioning
Canada	Masko (1997)	Distance learning
Canada	Stamler and Thomas (1997)	Use of patient stories

Much of the other literature reviewed also commented on the mode of delivery, but not as its primary focus. The variety is interesting and, whilst it may be being

utilised for practical reasons e.g. Masko (1997), where distance learning in Canada is becoming more utilised due to the geography of the country, there are useful lessons to be learnt from these papers. Many reflect content e.g. Mountford and Rogers (1996) and Slaninka (1992) whereby reflection is used to develop skills in the psychosocial aspects of learning. It is interesting to note the appearance in 1997 of patient stories - this ties in with this aspect of rehabilitation and survivorship becoming more represented in today's curriculum.

3.12.2 Summary

It is important to note, therefore, that not only content but the process of learning needs to be attended to if education for cancer nurses is to be successful in the future.

Summary of Points	
•	Identification of educational needs by cancer nurses is compatible with that of experts
•	Length of course dictates depth of content
•	Clinical experience within courses is valuable but increasingly difficult to achieve
•	Knowledge regarding the nature of cancer is seen as very important as a foundation to underpin practice
•	Knowledge regarding pain and pain assessment remains poor
•	Agreed national outcome regarding competence in giving Chemotherapy would be advantageous and possible
•	Education regarding cancer and treatment for nurses working in critical care settings is identified
•	Psychosocial aspects are becoming increasingly important - the level at which these are incorporated is unclear.
•	Rehabilitation and survivorship issues are rejected in the cancer care literature
•	Impact of education of patient care needs to be researched.
•	Development of nursing roles within the Calman and Hine (DOH 1995) framework is ongoing with the identification of educational needs being important to enhance these roles
•	Key skills such as questioning, listening, critical analysis and evaluation need to be incorporated into courses
•	Evidence based practice to be demanded
•	Course content needs to be constantly refined to meet the needs of the cancer nurse of the 21st century
•	Nursing roles e.g. specialist and advance practitioner need further elaboration if education is to be relevant for these practitioners
•	Process of learning as well as content is important

Chapter Four

The Documentary Analysis of ENB Cancer Care Education and related Curriculum

Key Points	
•	51 centres offer ENB post-registration cancer related and palliative care programmes
•	Minor modifications were identified to the schedule of programmes actually offered, 1997/8, compared with ENB official listing
•	Course documents from five of the nine major centres offering post-registration cancer-related programmes were analysed (the UWE was deliberately excluded)
•	Three of these centres indicated their programmes were currently undergoing revision
•	Course documents were analysed to identify a) degree of compliance with the ENB's stated aims for each programme; b) how far course curricula currently draw on relevant research evidence, in relation to the nine major themes identified in the literature review and c) how far the stated learning outcomes of the courses relate to national healthcare priorities as regards cancer nursing
•	It was not possible to assess the **effectiveness** of either the programmes or their assessment strategies from documentary analysis alone

4.1 Introduction

In addition to a review of the literature relevant to cancer care education a documentary analysis of the curricula of post registration ENB validated awards was conducted. This was 'to establish whether professional education ... is relevant and appropriate to today's practitioners caring for clients with cancer, and to see whether these programmes are comparable nationally in terms of knowledge and clinical competencies' p2 (UWE, 1997). It was also argued that 'anecdotal evidence suggests that clinical courses vary widely around the country and there is an urgent need for development of national core competencies in order to promote comparability for these courses in the future' (ibid). Therefore, the aim of the curriculum analysis was to undertake an extensive overview of the range of ENB post-registration cancer nursing courses offered throughout England, together with an initial assessment of the extent to which they respond to local health care needs, yet have national comparability in terms of knowledge and clinical competence.

Discussions with the ENB R and D Committee and the relevant Board Officer indicated that the analysis should be focused upon post-registration ENB validated courses related to cancer care and palliative care education. The learning outcomes and course content were considered in the light of the evidence base identified from the literature review and the extent to which learning outcomes reflect multi disciplinary and multi agency teamwork, rehabilitation and health promotion in the area of cancer care as recommended by Calman and Hine (DOH 1995).

Additionally assessment strategies were examined in order to explore how these impact on the students' learning experience.

4.2 An Overview of the Programmes

Circular 1998/01 RLV January 1998 issued by the ENB lists five post registration courses of direct relevance (both in general and specialist terms) to cancer nursing:

- ENB 237 Oncological Nursing
- ENB 240 Paediatric Oncological Nursing
- ENB A11 Breast Care Nursing
- ENB N09 Principles of Breast Care
- ENB N14 The Principles of Haematology and Bone Marrow Transplant

In addition, there are three others which may be of considerable interest to cancer nurses:

- ENB A18 Palliative Care
- ENB 931 The Continuing Care of the Dying Patient and the Family
- ENB 285 Specialist Programme in the Continuing Care of the Dying

There are also the following specialised courses available in a very few award centres:

- ENB A27 Haematology Nursing
- ENB N10 Care of Patients receiving Radionuclides
- ENB N34 Nursing Care in Lymphoedema Management
- ENB N37 Developing Clinical Practice in Palliative Care
- ENB N51 Principles of Managing Children's Pain
- ENB N59 Care of the Patient having Chemotherapy
- ENB N92 The Nature of Cancer and its Treatments
- ENB N93 Working with the Person with Cancer

The research team felt that it was important to try to gauge how many of these ENB validated programmes were currently being offered by the centres and a national survey of provision was conducted during May-July 1998. By means of a postal survey, all centres accredited as offering any of the post registration courses listed above were asked to complete a brief questionnaire indicating which programmes were currently running.

All 51 centres were contacted and, after one written reminder, all except three had replied. Follow-up telephone calls in the autumn of 1998 completed the data required for 100% response rate (see Tables 4.1, 4.2 and 4.3)

All centres listed were running at least some of the courses validated. However many had incorporated these into a first degree or diploma modular framework. Several had altered their portfolio of programmes and one had lost its NHS Executive contract to provide healthcare educational programmes.

Specifically two centres were no longer offering the ENB 237 Oncological Nursing programme and one was no longer running the ENB 240 Paediatric Oncological Nursing programme. In all three of these centres other appropriate ENB post registration awards are now being offered, replacing the ENB 237 and ENB 240 programmes. Additionally, three other centres were running or proposing to run from September 1998, the ENB 237 award. One of the two ENB N34 Nursing Care in Lymphoedema Management had been withdrawn from another centre but a new ENB N34 programme was being run elsewhere. Two centres were no longer offering the ENB 285; one other centre was now running it. Three further centres had ceased to run the ENB 931 Continuing Care of the Dying Patient and the Family programme. This course was, however, now being offered in an additional centre apart from those listed by the Board. Another 15 centres indicated that they were offering additional cancer and cancer-related courses to those listed by the Board Circular 1998/01 RLV.

These changes identify some of the difficulties that the Board faces in keeping the data up-to-date as well as the very positive way in which centres are able to respond to the changing cancer education and care agenda by developing and modifying their educational portfolios in this field.

Table 4.1 Post Registration courses of direct relevance to cancer nursing

Course Number	Course Title	Number of Courses Validated by ENB	Number Actually Running 1998
ENB 237	Oncological Nursing	25	26
ENB 240	Paediatric Oncological Nursing	6	5
ENB A11	Breast Care Nursing	5	6
ENB N09	Principles of Breast Care	7	7
ENB N14	Principles of Haematology and Bone Marrow Transplant	4	4

Table 4.2 Courses of considerable interest to cancer nurses

Course Number	Course Title	Number of Courses Validated by ENB	Number Actually Running 1998
ENB A18	Palliative Care	13	13
ENB 931	The Continuing Care of the Dying Patient and the Family	44	42
ENB 285	Specialist Programme in the Continuing Care of the Dying	24	23

Table 4.3 Specialised Courses

Course Number	Course Title	Number of Courses Validated by ENB	Number actually running 1996
ENB A27	Haematology Nursing	1	1
ENB N10	Care of Patients receiving Radionuclides	1	1
ENB N34	Nursing Care in Lymphoedema Management	2	2
ENB N37	Developing Clinical Practice in Palliative Care	4	4
ENB N51	Principles of Managing Children's Pain	2	3
ENB N59	Care of the Patient having Chemotherapy	1	2
ENB N92	The Nature of Cancer and its Treatments	2	3
ENB N93	Working with the Person with Cancer	2	3

It is clear that there is one major course related to cancer nursing (ENB 237 Oncological Nursing) with its specialist Paediatric programme (ENB 240 Paediatric Oncological Nursing). The other cancer nursing courses are of a very specialised nature and offered by very few centres. Palliative care nursing is a growing specialism and the number of centres offering the two main courses (ENB 931 and ENB 285) reflects that trend.

Recruitment to the programmes appears to be far from robust, however. The places nationally available on all these programmes are detailed in Table 4.4 below

together with the overall numbers of students in training during 1997/98. The figures reveal that a considerable number of validated places remain vacant and a low level of uptake across all programmes. One of the implications for the ENB must be to look for reasons for this shortfall in demand and then to assist providers to address the problem and possibly to rationalise provision.

Table 4.4 1997/98 Places Available and Students in Training (national)

Course No	Course Title	Places available	Students in training 1997/98
ENB 237	Oncological Nursing	975	484
ENB 240	Paediatric Oncological Nursing	231	60
ENB A11	Breast Care Nursing	325	120
ENB N09	Principles of Breast Care	385	101
ENB N14	Principles of Haematology and Bone Marrow Transplant	145	52
ENB A18	Diploma in HE in Palliative Care	388	112
ENB 931	The Continuing Care of the Dying Patient and the Family	3,504	1,022
ENB 285	Specialist Programme in the Continuing Care of the Dying	791	300
ENB A27	Haematology Nursing	60	33
ENB N10	Care of Patients receiving Radionuclides	25	0
ENB N34	Nursing Care in Lymphoedema Management	150	2
ENB N37	Developing Clinical Practice in Palliative Care	117	35
ENB N51	Principles of Managing Children's Pain	155	9
ENB N59	Care of the Patient having Chemotherapy	190	62
ENB N92	The Nature of Cancer and its Treatments	170	8
ENB N93	Working with the Person with Cancer	110	21
Source: ENB statistics January 1999			

A preliminary analysis of current provision suggested that there were nine major centres (including the University of the West of England) providing post registration

courses in cancer and the related area of palliative care, covering the majority of the courses validated. Other centres offered a rather more restricted number of awards, making any analysis of their portfolio less generalisable at a regional or national level. The sampling strategy was to approach all eight major centres, apart from the University of the West of England, with a view to securing validation documents related to such of the programmes listed as they ran (See Tables 4.5 and 4.6). The major centres were located throughout England, and included the metropolis. Their programmes were both those whose curriculum guidelines were generated by the Board (the courses without the alphabetical prefix) and those which were centre generated (those with an alphabetical prefix to the number). Of the awards analysed in this study, the ENB 237, 240, 931 and 285 are courses with ENB-generated curriculum guidelines whereas the A11, N09, N14 and A18 awards are centre-generated with the Board holding the guidelines generated first by the originating centre. All eight centres offered the major programme preparing nurses for caring for patients with cancer - ENB 237.

This sampling strategy was felt to be the most effective way of examining learning outcomes and course content in relation to the evidence base identified in the literature review. It was felt to be important to gain an indepth knowledge of the curricula offered by these larger providers so as to begin to be able to offer the Board ways of identifying national "standards" of competence in cancer nursing. It is acknowledged that this approach does not allow for the possibility of making any statements about the ways in which educational provision between the larger and smaller centres might differ especially in their degree of responsiveness to both

local and national agendas. However, it was felt that this kind of differentiation was unnecessary at this stage in the analysis but that it could form part of the fieldwork for a future study examining effectiveness, in due course.

Table 4.5 Cancer Education Awards - Analytical Sample

Award Number	Course Title	Number	Percentage
ENB 237	Oncological Nursing	8/26	31
ENB 240	Paediatric Oncological Nursing	5/5	100
ENB A11	Breast Care Nursing	3/6	50
ENB N09	Principles of Breast Care	1/7	14
ENB N14	Principles of Haematology and Bone Marrow Transplant	2/4	50

Table 4.6 Palliative care awards - analytical sample

Award Number	Course Title	Number	Percentage
ENB A18	Palliative Care	2/13	15
ENB 931	The Continuing Care of the Dying Patient and the Family	7/42	16.5
ENB 285	Specialist Programme in the Continuing Care of the Dying	4/23	17

The major focus of the documentary analysis remained the key post-registration ENB cancer programmes, ENB 237 and ENB 240, with some scrutiny of specialist

breast care courses, and the growing number of palliative care programmes. The palliative care programmes also include nursing care for other groups of dying people besides people with cancer e.g. people with HIV/AIDS, etc.

During February 1998 telephone contact was made with all eight Deans/Heads of Department deemed to be the major centres of provision and verbal agreement given by all eight to provide the necessary course documentation. A follow-up letter and research protocol was sent to each Dean in March 1998 and the documents then returned to the course team. Despite a written reminder in June 1998 only five institutions sent their documents to the research team (one Dean subsequently withdrawing agreement due to pressures of work and the other two not replying at all). This resulted in the numbers of documents finally being obtained for analysis as in Table 4.7.

Table 4.7 Number of Documents Obtained

Course Number	Course Title	Documents Obtained
ENB 237	Oncological Nursing	5
ENB 240	Paediatric Oncological Nursing	4
ENB A11	Breast Care Nursing	1
ENB N14	The Principles of Haematological and Bone Marrow Transplant	1
ENB A18	Palliative Care	2
ENB 931	The Continuing Care of the Dying Patient and Family	4
ENB 285	Specialist Programme in the Continuing Care of the Dying	3
TOTAL		20

In all 11 sets of programme documents relating to cancer care programmes and nine relating to palliative care were obtained and analysed. Altogether, 78 individual modules were analysed, of varying sizes and complexity.

4.3 Methodological and Contextual Considerations

The national context within which this research took place is one in which by 2009 1 in 3 of the population of England and Wales can expect to develop cancer at some point during their lives. According to Cancer Research Campaign (1998) it is estimated that only approximately 1% of the population of Britain diagnosed with cancer in the last ten years is still alive. The Health of the Nation Strategy (DOH

1992) and more recently 'Our Healthier Nation' (DOH 1997) continues to highlight cancer as a key health area, both in terms of health promotion and prevention as well as rehabilitation and cure.

A further aspect within which the research needs to be contextualised is that of the five responding institutions, three indicated that their programmes were currently being revised and that several awards were in the final year of their current validation. This is an indication of the evolving nature of cancer and palliative care nursing and correspondingly of the education required to support the specialist cancer nurse. Higher education providers are likely to recognise the imperative to review continuously both their course structure and curricula in order to meet the educational requirements of the National Health Service in the 21st Century.

The limitations of a one year project designed to undertake a comprehensive review of the relevant literature and to review course documentation with a view to investigating how far the courses were underpinned by research-based knowledge, must nonetheless be acknowledged. There was no empirical phase within the project, designed to ascertain how far the course intentions were actually being put into practice or how far students/service providers/service users felt the learning outcomes were effective in improving patient care. Nor was it considered appropriate to sample course documents outside of the major providers. These limitations notwithstanding, the documentary analysis is offered as a means of examining three factors:

a) compliance with the ENB's stated aims for each programme;

b) how far course curricula currently draw on relevant research evidence to underpin post registration programmes of study for cancer nurses; and

c) how far the stated learning outcomes of the courses relate to national healthcare priorities of multi-disciplinary/multi-agency teamwork, rehabilitation and health promotion (Calman and Hine DOH 1995).

Each set of course documents was analysed using a series of proforma (appendices four, five and six) in order to provide several sets of comparative data. Firstly, the overall framework of the award was considered, its length, structure, how far it was developed and planned to meet national, regional and local healthcare priorities, its pattern of delivery and its modes of assessment (appendix four). Secondly, the individual modules that made up the award were scrutinised in order to establish how far and in what ways the stated learning outcomes:

a) complied with the ENB's aims for the programme; and

b) how far the national healthcare priorities of multi-disciplinary/multi-agency teamwork, rehabilitation and health promotion were demonstrated in either/both their theoretical and clinical components (appendix 5).

Thirdly, the module content was assessed against the major themes derived from the literature review, in order to try to ascertain how far indicative course content was informed by the current research evidence. This was done in order to make some

kind of judgement about the relevance of the programme of study to the best possible preparation for the nursing of people with cancer.

The study serves to provide initial information to the ENB relevant to the development for a national standard of curricular content in cancer care education. Its strength would be increased by the addition of a large scale empirical evaluation which would examine the outcomes of curricular intentions. Such a later study might look at the comparability of outcomes and clinical effectiveness of practitioners who have completed the programmes.

4.4 Findings

4.4.1 The Long Specialist Oncological Nursing Courses: ENB 237 Adults and ENB 240 Paediatric Oncological Nursing

These courses are validated by the Board to be 24 weeks long and are intended for nurses on parts 1, 2, 8, 12 and 15 of the Professional Register who have at least 'six months' post-qualifying experience. The overall aim of these programmes is 'to enable suitably qualified nurses to become competent to assess, plan, deliver and evaluate the specialised nursing care of patients undergoing treatment for malignant disease and give support to relatives and staff' ENB Circular 1998/01 RLV. Four of the institutions reviewed ran both these awards together for core content, offering specialist modules for adult and paediatric care when this was appropriate. The remaining programme reviewed offered the adult (ENB 237) award only. This

documentary analysis, therefore, considers the awards as one with some specialist components.

4.4.2 Structure of the award

The first general comment to make is that the structure of the five courses examined demonstrated a wide degree of diversity. Despite the fact that all modules offered were at level 2, in two cases the award formed part of the higher education institutions (HEI's) BSc framework, in a further two it led to a Diploma in Higher Education and in only one were the modules and the award itself not linked to a diploma or degree qualification. Similarly, the number of modules offered as part of the award varied from one institution's two 12 week modules to one consisting of nine modules each of 10 level 2 credits to be completed over 24 weeks. In part these differences relate to the HEI's responsiveness to the local context in framing their interpretation of the ENB's programme aims. However, it is difficult to claim consistency in either curricular content or learning outcomes where the same award, supposedly with national comparability, is delivered in two 12 week long modules and in nine 10 credit modules.

One particular programme reflected many of the key skills identified in the literature (Fitch and Thompson 1996; Graydon et al 1993; Greenslade 1991): the nurse as 'reflective practitioner' engaging in practice in a spirit of 'critical enquiry, analysis and evaluation' in the search for excellence in patient care and personal effectiveness. The programme aimed to enable nurses to enhance their ability to

make 'informed clinical judgements and decisions' to 'apply theory and research to practice' and 'to prepare students to function effectively in a climate characterised by change' (i.e. to become lifelong learners). The four other programmes analysed contained these key skills to a somewhat lesser degree.

4.4.3 Meeting local and national needs

The rationale put forward for each award clearly demonstrated that both local and national needs were taken into account in the design and structure of the award and in its content. The need highlighted by Calman and Hine (DOH 1995) for specialist cancer nurses, working within a multi-disciplinary team and able to nurse patients with both common and rare malignancies, was cited. Similarly, reference was made to the European Nursing Council recommendation that all patients should be supported by appropriately trained nurses during the terminal phase of illness. One institution specifically stated that its cancer education programme had been revised and two new modules introduced 'to reflect the changing role, knowledge and skill requirements of cancer nurses'. A significant part of that changing role has been to acknowledge the place that patients have in helping to determine the kind of care that most meets their own healthcare needs (DOH 1991; Goldberg et al 1984; Hutchinson et al 1991; Knaus et al 1986; Rubenstein et al 1984)

Analysis of the membership of course development teams indicated the inclusion of practitioners from a variety of local healthcare institutions and belonging to a range of healthcare professions. This was taken as a measure of the extent to which all

five awards were developed in response to specific local circumstances as well as to national priorities.

4.4.4 Stated learning outcomes and indicative course content

In terms of compliance with the Board's aims of both the ENB 237 and ENB 240 programmes, all the analysed awards identified learning outcomes aimed to help the nurse become competent to assess, plan, deliver and evaluate the specialised nursing care of patients undergoing treatment for malignant disease.

Typically, these learning outcomes might appear thus:

- Provide care which applies specialist knowledge and skills to meet the needs of their specific client population, together with a broader understanding of health promotion and health care provision.

- Develop an increased ability to rationalise the planning, implementation, delivery and evaluation of care following and throughout treatments.

The practice or clinical learning outcomes related to the specific competencies required of the specialist cancer nurse i.e.

- The practitioner can provide safe and effective care for a client receiving any of the three main treatment modalities employed in the management of cancer, including the application of the principles of symptom control.

- Be able to evaluate the care and modify the plan of care appropriately.

However, as might be expected, not all individual modules within each award covered all these points. One institution constructed its award very tightly in accordance with the ENB's aims: the other four offered a more flexible approach, whilst still complying fully with the aims. Most identified a considerable body of underpinning knowledge that students would engage with in order to assist them to develop further these competencies. (Backmann-Mettler 1988; EONS 1989; Greene 1990; Grobbelaar 1992; Lamb and Lynch 1997; Love et al 1995; Stolte et al 1988) In some cases, the indicative content of such learning outcomes was so extensive as to cast doubt on the depth to which each component could be explored.

Furthermore, in terms of national priorities, all programmes analysed indicated that health promotion was adequately considered in the curriculum but significantly, one institution did not appear to include a consideration of the issue of multi-disciplinary team working nor that of rehabilitation within its award. Other curricula identified in the literature review indicated both health promotion and rehabilitation as components of their programmes. Incidental literature emphasised health promotion as a growing need but little attention was paid to rehabilitation until very recently.

This is a newly emerging topic, encouraged by Calman and Hine in the UK (DOH 1995).

Overall however, these aspects were included in both the theoretical and practical/clinical learning outcomes i.e.

- Appreciate concepts relating to rehabilitation and the cancer patient.

- Demonstrate the ability to work efficiently with other members of the inter-disciplinary team.

- Be able to identify and respond to the health educational/promotional needs of the patient, carers and other staff.

The major clusters of themes emerging from the literature were:

a) prevention and detection/diagnosis
b) nature of cancer
c) treatment
d) psychosocial aspects of care
e) rehabilitation and survivorship
f) death and dying
g) organisation of care
h) key skills

i) future of nursing

a) Prevention and detection/diagnosis

Across all the awards analysed, both for adult and paediatric oncological nursing (EONS 1989), health education and health promotion, identified strongly in the literature were well covered. Aspects of screening, including the role of the nurse in screening and the early detection of cancer, were covered in all but one course. However, genetics, which also emerged as a strong theme in the literature, (Anderson 1994; Jenkins 1997) was only dealt with in three of the nine awards (adult and child) examined.

b) Nature of cancer

As might be expected, the nature of cancer, altered physiology and its epidemiology were well covered in the documents, with several modules across the institutions bearing titles such as 'The Nature of Cancer'. The theme was seen as very important in the literature as one of the bases of all post qualifying cancer nurse education (Carroll et al 1992; Grant et al 1996; Tomaszewski et al 1995)

c) Treatment

All aspects of therapy were found in the curricula analysed. These included chemotherapy, radiotherapy, immunotherapy etc, and most awards dealt with

complementary therapy as well. The treatment for site specific cancers such as breast, ovarian, testicular, etc, was pinpointed and all courses dealt with pain, symptom control, nausea and vomiting, and nutrition. Lymphoedema was identified as a separate topic of study. All courses dealt with oncological emergencies, how to recognise and how to respond to them. Nursing care post surgery did not appear to be specifically dealt with: perhaps because pre registration courses are expected to train nurses in post operative care.

d) Psychosocial care

In all the awards great emphasis appeared to be placed on the holistic needs and care of the patient and the importance of appropriate psychosocial care. Without an understanding of the cultural and gender context within which cancer patients live their lives, nursing care would be very poor and lacking in its effectiveness. All the awards dealt with these qualities of care fully, identifying how issues such as the social stigma attached to cancer can impact on patient progress. Family centred care (Casey 1988), identified as especially significant in the literature, was well covered. Each award examined by the research team explored both the legal and ethical aspects of nursing care although legal issues surrounding nursing the patient with cancer were not identified very strongly in the literature.

e) Rehabilitation and survivorship

Surprisingly, although some awards covered these topics in full, at least one institution failed to deal with these topics in the award documentation offered for analysis. The literature analysis indicated that only recently this topic been identified as being of significance on cancer care education.

f) Death and dying

Grieving and loss were adequately dealt with on all awards. Aspects of spiritual care were apparently omitted from at least two institutions' awards. However, the precise meaning of this phrase might be perceived as ambiguous and the concept might have been well covered by the award although not identified specifically as such. Some awards specifically mentioned nursing care for the final 48 hours of life under the overall heading of palliative care.

g) Organisation of care

There was much greater variability across the awards offered when exploring this major theme to emerge from the literature. By no means all the courses examined included mention of the concept of working with others or in teams, as identified by Closs et al (1996 and 1997). Neither was inter-agency working or seamless care extensively covered. The role of information technology in support of oncological nursing was not touched upon at all. There was some focus on the role of the

patient and considerable emphasis on the importance of mentorship and peer support amongst the nurses involved in the care of the patient with cancer.

h) Key skills

Most awards emphasised the importance of basing clinical practice on evidence and encouraged self-critical reflection, audit and evaluation in nursing practice. Some focused on the role of nurse as advocate for the patient, as identified by Cooper and Pemberton (1996). No awards seemed to identify the role of nurse as leader of the care team in their discussion of key skills, despite the work by Closs et al (1997).

i) Future of nursing

Finally, in only one award was it possible to identify any aspect of the future of nursing as part of the curriculum. At least two higher education institutions included some fairly extensive material on the history of cancer nursing, in order to underpin modules entitled 'An Introduction to Cancer Nursing'.

4.4.5 Summary

This detailed analysis has revealed some significant gaps in the curricula currently being offered for ENB 237 and 240 programmes, especially in the areas of rehabilitation and inter-agency working. A more generalisable understanding of the

meaning of the term 'spiritual care' might be helpful in analysing whether patients' and their carers' spiritual needs are being adequately met.

It is clear that awards validated by the Board as national awards exhibit considerable variation in both their structure and course content. The importance of underpinning knowledge to enable nursing care to be based on research evidence was clearly identified throughout the documents and nurses were encouraged to engage in analysis and reflection of their own practice (DOH 1993).

4.5 Findings

4.5.1 Specialised Cancer Courses - A11 and N14

In addition to the analysis of the main post-registration cancer education courses, as part of their modular postgraduate programmes, two institutions returned documents relating to shorter, specialised cancer courses - breast care and haematology. The analysis of these documents can in no way be deemed representative of the ways in which higher education institutions across the country are delivering these programmes. However, since overall numbers are so small and each course is designed to meet particular local/regional needs as well as to contribute to national provision, what follows below provides a useful snapshot of two of these specialised awards.

4.5.2 A11 Breast Care Nursing for Nurses and Health Visitors on Parts 1, 2, 11 and 12 of the Professional Register

This is a course lasting six consecutive weeks comprising five weeks' study and one week clinical experience plus a self-directed learning component programme totalling 40 days. The stated aim of the programme is 'to enable programme members to assess, plan, implement and evaluate appropriate nursing action at all stages of the diagnosis and treatment of breast disease, wherever the patient is receiving care'.

In terms of the one award analysed the course modules demonstrated that the aims of the programme were being met through a systematic and rigorous curriculum that explored the underpinning knowledge needed by nurses in breast care nursing. Indicative learning outcomes from the modules included:

- explore the chronic nature of cancer and understand the outcomes of therapy

- critically evaluate the various treatment approaches utilised within breast cancer, identifying the nurse's role in management of treatment and associated side effects.

All aspects of the themes emerging from the literature relevant to breast cancer nursing (Casey 1989; Chaplin 1996) were covered to some extent in the course content with especial emphasis on the psychosocial aspects of care, as well as issues

of body image, self-concept and self-esteem and prosthetics and cosmetics in cancer care.

There was not much emphasis placed in this course on aspects of palliative care and death and dying.

4.5.3 N14 The Principles of Haematology and Bone Marrow Transplant for Nurses on Parts 1, 2, 8, 12 or 15 of the Professional Register

This ENB post-registration award is undertaken in 20 days, arranged in two week blocks with at least four weeks between the blocks to allow for project work to take place. The programme is designed 'to enable suitably qualified nurses to study new developments and update their existing knowledge of the care and management of patients with haematological disorders and those requiring bone marrow transplants'. Both local and national recruitment occurs to the course. In the higher education institution the course is delivered in 15 theory days and five days of educationally led practice.

In the two modules it appears that all the course aims are being met, viz: care of patients, management of patients, underpinning knowledge and support to relatives and colleagues. The four key learning outcomes include:

- assess, plan, implement and evaluate nursing care for clients/patients presenting and undergoing treatment regimes

- evaluate strategies available for the emotional and psychological support for patients, clients, relatives and friends.

In terms of the major themes emerging from the literature it is clear that this course focuses on two dominant areas: treatment and psychosocial care. Students are offered a very thorough grounding in the highly specialised clinical treatment involved in nursing people with this kind of health problem. No other major themes from the literature are covered: nor would it be expected that they should be.

As indicated earlier these specialised short courses have been examined as being illustrative of the kinds of course validated by ENB. The ways in which these two institutions originating these courses have chosen to interpret the brief held by the ENB cannot, of course, be taken as typical of any other such specialised courses offered elsewhere.

4.6 Findings

4.6.1 ENB 931 - The Continuing Care of the Dying Patient and the Family; ENB 285 - Specialist Programme in the Continuing Care of the Dying Patient and Family; and A18 the Principles of Palliative Care

Although these awards are not devoted exclusively to the care of people with cancer, as they include reference to nursing people with other life-shortening illness

such as AIDS and multiple sclerosis, they were considered to be of sufficient relevance to cancer care nurses to be included in the documentary analysis. ENB 931 may be taken as a free-standing award in its own right but ENB 285 may only be accessed after the successful completion of ENB 931, and ENB A18 after the successful completion of ENB 285. It is possible to be admitted to ENB A18 via APEL or APL (accreditation of prior (experiential) learning).

Only two ENB A18 courses were examined, both offered as part of a Diploma in Palliative Care that built on ENB 931 and 285 to make up the award.

4.6.2 ENB 931 - The Continuing Care of the Dying Patient and the Family for Nurses, Midwives and Health Visitors on all parts of the Professional Register

The overall aim of the programme is 'to give nurses, midwives and health visitors an appreciation and increased awareness of the clinical, pastoral and psychosocial aspects of the continuing care of the dying patient and the family' ENB Circular 1998/01 RLV. The course is 30 days in duration.

i) Structure of the award in meeting local and national needs

Once again, there was considerable variation across the institutions reviewed in the way in which the delivery of the award was structured. One award was delivered by means of one 30 credit module: in two others the award was delivered through

three modules: two theoretical and one practical. In the fourth institution two modules were used to deliver the award.

ii) Meeting local and national needs

These variations in the structure of the award are accounted for by means of local interpretations of nursing need in the development of the award. All award development teams included representatives from local hospices and local day care centres. In general the awards were delivered in conjunction with local hospices that care for the dying patient. Often these were of a religious foundation and the courses drew on a 'tradition of ensuring a peaceful, pain-free and supported death'. In response to national needs the number of centres offering palliative care programmes has increased considerably during the past ten years.

iii) Stated learning outcomes and indicative course content

In terms of compliance with the ENB's aims of the programme all four sets of documents appeared to meet these in full, as assessed by their stated learning outcomes. Characteristically, learning outcomes appeared thus:

- assess the holistic needs of the patient, and plan, provide and critically evaluate the nursing care required to meet those needs.

- identify psychosocial and social needs of patients with life limiting illness and discuss strategies for assessment, intervention and evaluation.

Both theoretical and clinical modules were taken at the same time (where the modules were thus separated) to form an integrated learning experience for the student.

As might be anticipated, the themes rehabilitation and health promotion were not covered in any depth in the award but multi-disciplinary and inter-agency working in the care of the dying was highlighted in the learning outcomes e.g.

- Analyse the role of the multi-disciplinary team in providing palliative care: at home, day care and in-patient care, in support of, and in conjunction with, the primary healthcare team.

iv) Emergent themes from the literature

The major themes emerging from the literature which this set of awards identified in its course content as being of importance in the preparation of those working in a palliative care situation were:

a) Psychosocial aspects of care

b) Death and dying

c) Organisation of care

d) Key skills

a) Psychosocial aspects of care

Within this theme, sub-themes such as family-centred care, ethics, and relationship skills were clearly highlighted as identified in the literature. (Heaven and Maguire 1996; Meek and Pietroni 1993; Wettergren et al 1996)

b) Death and dying

Loss and grief, spiritual care as well as the control of symptoms were emphasised here. Some specific aspects of symptom control such as management of pain, nutrition and nausea and vomiting were identified in at least two courses.

c) Organisation of care

The importance of working with others and inter-agency co-operation was acknowledged. Discussion of the allocation of scarce resources was indicated in the contents of one course. Mentoring and the emotional care of both course members and colleagues was considered important in at least two institutions' documents.

d) **Key skills**

The use of evidence based practice (Fitch and Thompson 1996; Graydon et al 1993; Greenslade 1991; Gullo 1997) and reflection (Mountford and Rogers 1996; Slaninka 1992) in order to inform clinical judgement were stressed, as identified in the literature

v) **Summary**

This focus on psychosocial care, death and dying, organisation of care and key skills continues to be highlighted in the courses that build on from the ENB 931 such as ENB 285 and ENB A18. The ENB 931 would appear therefore to be clearly meeting its stated aims of providing course members with 'an appreciation and increased awareness' of those aspects of nursing care that are essential when working with the dying patient and family.

4.6.3 ENB 285 - Specialist Programme in the Continuing Care of the Dying Patient and Family

This is a longer course, of eight weeks' duration, which might also include an additional briefing day before the programme begins and a review day three to six months after the programme ends. The programme is aimed at suitably qualified nurses with some experience in the care of the dying patient and the family. Entrants must normally hold the Board's award ENB 931 or its equivalent. The

aim of the programme is 'to prepare experienced nurses for a specialist role in the care of the dying patient and the family. The programme involves in-depth study of communication and bereavement counselling, symptom control, management of the service and principles of education' (ENB Circular 1998/01 RLV).

i) Structure of the award in meeting local and national needs

In order to 'top up' the 931 award to be awarded the ENB 285 the additional modules required by the higher education institutions reviewed require in one case, one further 30 credit module and, at the other extreme, six further ten credit modules and a seventh practical double module. This variation, together with the evidence of the inclusion of local practitioners on the planning teams, is taken to indicate that courses are designed to meet both local as well as national needs.

ii) Learning outcomes and indicative course content

In terms of complying with the ENB's aims for the programme it is clear from a detailed analysis of the documents that in all the institutions reviewed, course content is intended to meet those aims.

Indicative learning outcomes documented include:

- Appreciate that there are differing approaches to communication and counselling and explore their appropriate application to the individual and family.

- Appreciate the role of health promotion within palliative care and discuss its value and application.

Again, the role of multi-agency working is stressed in the care team.

iii) Emergent themes from the literature

The overarching themes drawn from the literature and included in the preparation for nurses working in a palliative care environment are: treatment; psychosocial care; death and dying; organisation of care, and key skills. These are broadly those dealt with in ENB 931 with the addition of a greater focus on treatments such as chemotherapy, radiotherapy and complementary therapy.
Aspects of teaching and health education and promotion in order to enable patients to take greater control over their own deaths is also apparent.

iv) Conclusion

As might be expected given the structure of this award, it broadly covers the same themes as ENB 931, albeit covered in a more sophisticated and in-depth manner. There is considerable emphasis placed on the students' own experience of and

reflections (on death) as a learning strategy (Burnard 1989; Hinchliff 1993) and structures are generally in place (such as a student counsellor) to support the students in this kind of learning experience.

4.6.4 ENB A18 the Principles of Palliative Care for Nurses and Health Visitors on Parts 1, 2, 3, 4, 5, 6, 7, 8, 11, 12, 13, 14 or 15 of the Professional Register

In two of the sets of documents received ENB 931 and ENB 285 were augmented by a further module to complete the programme for ENB A18. The ENB has validated A18 as a part time modular programme taken over two years to examine the principles and practice of palliative care for nurses working with patients receiving palliative care. The programme aims 'to enhance the registered nurse's knowledge, interpersonal, research and analytical skills in palliative care nursing'. The Board indicates (ENB Circular 1998/01/RLV) that the programme will be delivered by means of seven modules although it goes on to list only six:

- the principles of palliative care
- the social content of palliative care
- managing relationships
- adaptation to loss
- pain
- symptom management

Neither of the programmes reviewed delivered the programme exactly according to this model although the five module programme at one HEI and the four module programme at the other certainly complied with the ENB's stated aims for the programme.

Both A18 programmes dealt with broadly similar themes emerging from the literature as ENB 931 and ENB 285 with much greater emphasis on the organisation of care, management of the service, distribution of resources, etc. Amongst key skills, those related to research such as evaluation, audit, synthesis and reflection were emphasised as were those relating to the nurse as leader of the care team. Interestingly, in all the documents analysed, across both the specific cancer care courses and more general palliative care ones, this was the first specific exploration of one of the literature's key themes, the nurse as leader of the care team (Belcher and Shurpin 1995; Gullo 1997; Jacobs and Kreamer 1997; Lathrop and Otte 1993; McGuire 1997; Nelson-Marten et al 1997; Rosenzweig et al 1997).

4.7 Assessment strategies

The third outcome of the research was intended to be 'an examination of assessment strategies with specific regard to the relationship between theory and practice'. This brief overview of assessment strategies as regards cancer care education draws on both the literature reviewed around the current theories of assessment as regards theoretical knowledge and clinical competencies and the analysis of course documents. This section of this chapter will focus mainly on the assessment

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strategies employed in the two main cancer education programmes ENB 237 and ENB 240 as this material is deemed to be most relevant to the Board's requirements.

Within the literature reviewed, several studies (Canel et al 1990; Grant et al 1996; Heaven and Maguire 1996) examined the assessment of the theoretical learning outcomes at the end of the taught components of the programme. It was more difficult to identify any which discussed the effectiveness of assessment strategies relating to clinical competencies.

All the courses reviewed produce a clinical assessment schedule against which to assess the nurse's clinical performance. All clinical assessment is carried out by staff holding the ENB Assessors Certificate 998 and the specialist course. Such a schedule typically includes the following headings, with up to ten detailed criteria for achievement listed under each subject heading:

1. Be able to holistically assess (sic) the needs of the child with problems related to cancer, his (sic) family and significant others.

2. Based upon a comprehensive assessment of the child, plan the care which will appropriately meet the identified needs.

3. Be able to implement the care planned effectively and within an acceptable time frame.

4. Be able to evaluate the care given and modify the plan of care appropriately.

5. Demonstrates the ability to work effectively with other members of the inter-disciplinary team.

6. Recognise and respond to the life threatening situations in an effective and appropriate manner.

7. Demonstrates through her practice an appreciation of the importance of effective interpersonal skills.

Detailed criteria for the achievement for this last heading are now listed as an exemplar:

Criteria for achievement

- assesses the situation and adopts an appropriate communication strategy;
- initiates, maintains and concludes interactions at an appropriate time and level with colleagues, children and family members;
- actively listens and responds to verbal and non-verbal cues; and
- demonstrates awareness of intrinsic and extrinsic barriers to communication and responds appropriately.

All the individual modules, both practical and theoretical, examined were assessed in some manner and this gives rise to concerns about 'assessment overload' where programmes were delivered by means of a large number of small modules. Very detailed competence schedules for the assessment of practical learning outcomes also raise the question about how far the 'check list' approach to the assessment of practical learning outcomes merely measures the ability of a student to perform a specific task within a particular setting, as opposed to understanding the rationale for performing the task and being able to perform it, or appropriate variations on it, in a variety of settings (Attwood 1995).

In all the documents reviewed, clinical practice modules ran alongside theoretical ones or were wholly integrated into them. One higher education institution listed the following ways in which theory and practice are linked in the programme.

- Structured, supervised reflection on practice.

- Practice-based theoretical assessments.

- Use of critical incident analysis in seminar and discussion sessions.

- Teaching the course work alongside students' work in practice areas to link theory to practice.

- Testing of application of knowledge and understanding to clinical practice in Clinical Assessments.

- Use of learning contracts

Clearly the course intentions fully supported a student learning experience that integrated both practical and theoretical knowledge, and higher education institutions often supported their curriculum and assessment philosophy with reference to educational theorists such as Schön (1991).

Table 4.8 shows the range of assessment strategies that were used across the 50 modules relating to the ENB 237 and 240 oncological nursing programmes that were analysed as part of this project.

Table 4.8 Assessment Techniques for ENB 237 and 240

Type		Number
Written Assignments	2000 words	6
	3000 words	4
	4000 words	8
	5000 words	2
Unseen Examinations	1½ hours	1
	2 hours	6
	3 hours	2
Patient Centred Project and Seminar Presentation		2
Audiotape analysis		2
Literature Review	2000 words	1
	3000 words	
	4000 words	2
	5000 words	

As well as the literature reviews separately indicated, the written assignments included clinical essays, client care analyses and critical reviews. Assessment of clinical practice by means of assessment in the practice setting, personal reflection and the completion of learning contracts was conducted throughout the length of the courses.

For the Breast Care Nursing ENB A11 and Principles of Haematological and Bone Marrow Transplant N14 programmes that were received both seen and unseen examinations, and essay-type assignments as well as audio tape analyses and a seminar presentation and written reflection were used as assessment techniques.

Table 4.9 indicates the modes of assessment techniques identified for the 23 modules that were analysed within the ENB 931, ENB 285 and ENB A18 Palliative Care Programme. The assessment of clinical practice was required within the practice setting as well as integrated into the written assignments.

Table 4.9 Assessment Techniques for ENB 931, 285 and A18

Type of Assessment		Number
Written Assignments	2500 words	9
	3000 words	3
	3500 words	1
	4000 words	2
Unseen Examinations	2 hours	3
Resource Pack		6
Literature Review	4000 words	2
Oral assessment		1
Audio tape analysis	3000 words	1

Once again, the written assignments took a wide range of forms.

A variety of assessment strategies was used within any one award, reflecting the diagnostic, formative and summative purposes of assessment activities. Across all the awards the complete range of methods of assessing students' work appeared to be demonstrated: unseen examinations (such as four questions in three hours); essays of a specified word length; client care analyses of specified word lengths; literature reviews; seminar presentation and subsequent project; analyses of audio tapes of therapeutic/counselling interviews. No award used the same mode of assessment for all the modules and all written work required the students to integrate aspects of professional practice into their assignments.

Unseen examinations were included for two major reasons. Firstly, the ability of students actually to be able to remember certain pieces of information in a situation of heightened stress is very important for certain aspects of cancer nursing. Secondly, all higher education institutions have to guard against the issue of plagiarism in these days of word processing of written assignments.

The following series of assessments would be experienced by a course member following one of the ENB 237 awards and has been selected at random to give an indication of the students' experience of assessment. James (1996) has examined mature students' reaction to assessment within a higher education setting and, in particular, the impact of grades and feedback received on self-esteem and self-perception and how these, more than any other aspect of their higher education

dominated the student learning experience. It is therefore important when assessing the effectiveness of these training programmes in preparing a nurse for working with patients with cancer to consider not only curriculum content but also the means whereby student learning is assessed. Thus, during one 24 week long course a student would be subject to the following schedule:

Assessment Schedule for ENB 237

Module I	4,000 word essay	50%
	3 hour unseen examination	50%
Module II	4,000 word patient-centred project and seminar presentation	60%
	2 hour unseen examination	40%
Module III	3,000 word audio tape analysis and 1,000 word transcription	40%
	5,000 word critical care analysis	60%

Clinical assessment continues throughout the course, as well as the keeping of reflective practice journals.

From the documentation it is sufficiently clear that the assessment of student work is designed to integrate practical learning with its theoretical knowledge base and many innovative attempts are made to do so. Without a more detailed fieldwork study it is difficult to tell how far the students experience their assessment as being fully integrated in this manner. Nor is it possible yet to gauge how confident

practice and college based assessors may be that their assessment strategies are effective in practice.

4.8 Conclusion

This chapter has examined the course content of both branches (Adult and Child) of the major ENB validated post registration cancer education programme, together with that of some specialist cancer education awards. It has also explored the content of the major palliative care awards ENB 285, ENB 931 and ENB A18. It concluded with a review of assessment strategies and their likely impact on mature student learning. This analysis has been conducted against the backdrop of the preceding literature review in the field of cancer care related to the education and preparation of cancer nurses to enable them to meet the needs of the patient with cancer.

In the next chapter the key findings will be summarised so as to draw out their significance for the Board in relation to post registration cancer care education programmes. This will provide information to enable the development of core competencies with national comparability related to the latest evidence.

Summary of Points	
•	There is a growing tendency in the 51 centres offering post registration cancer-related and palliative care programmes to offer these within a first degree or diploma modular framework.
•	Educational centres appear to be able to respond positively and rapidly to the changing cancer care education agenda.
•	All awards analysed demonstrated compliance with ENB stated learning outcomes although the structure of the awards showed considerable variation across institutions
•	In the centres analysed, programmes have been devised to reflect both local **and** national priorities and their variation in structure is indicative of their responsiveness to these differing needs.
•	All cancer related awards covered the national priority of health promotion adequately
•	The major weakness of the curricula analysed appear to be in the areas of rehabilitation and interagency working (ENB 237 and 240).
•	Within the palliative care awards (ENB 931, 285 and A18) emphasis is placed on psychosocial care, death and dying, organisation of care and key skills.
•	All awards used a variety of assessment strategies.
•	In some programmes serious concerns are raised about the issue of assessment overload as being possibly detrimental to the effectiveness of the student learning experience.
•	All awards attempted to integrate the assessment of theoretical and practical learning.
•	In order to examine the effectiveness of these educational programmes on the standard of cancer care nursing an empirical study would be needed.

Chapter Five

Discussion of the Findings

Key Points	
•	There is a lack of reliable studies yielding valid evidence regarding the effectiveness of the delivery of cancer care education and its subsequent impact on the patient experience
•	It would appear that in some Trusts as few as 2% of qualified nurses working directly with patients for whom cancer is their primary diagnosis have undertaken any specialist cancer courses at all (Closs et al 1996)
•	Whilst the programmes mostly appear to draw on research literature effectively, the substantive topics of health promotion, rehabilitation and communication skills could usefully be enhanced
•	Critical care nurses may need further help in learning to respond effectively to oncological emergencies
•	The skills surrounding chemotherapy and pain and its assessment and management may need to be further strengthened and made increasingly transferable
•	Studies relating to the long term effectiveness of the educational programmes and of their effect on clinical practice were not apparent in the literature
•	Assessment strategies and assessment overload emerge as areas of some concern from the curricular analysis
•	There are some interesting comparisons to be made between the cancer care education and palliative care education programmes

5.1 Introduction

One of the major aims of the study was to provide a report for the English National Board to assist with development of core competencies in respect of cancer care education that demonstrated national comparability related to the latest evidence.

A key finding from this commissioned piece of research is that there is a lack of reliable studies yielding valid evidence regarding the effectiveness of the delivery of cancer care education and its subsequent impact on the patient experience. This is especially true in trying to identify those learning strategies, contextual features surrounding employment, and the specific characteristics of continuous professional development that successfully lead to a sustained change in cancer care nursing after any particular educational programme has ended. For example, Corner and Wilson-Barnett (1992) have tracked a cohort of learners where this was ineffective: however, successful strategies could not be identified in the literature.

Somewhat startlingly, such literature as does exist (Closs et al 1996) suggests that, notwithstanding the concerns expressed as to the effectiveness of such courses in the educational preparation of cancer care nurses, very few cancer nurses actually undertake any specialist cancer care courses at all. The tension between this apparent lack of specialist qualification held by a number of cancer care nurses and the fact that the current study indicates a relatively low take up of existing course places, should perhaps be explored further within a nurse education policy and

financial framework. Both the apparent lack of staff holding appropriate qualifications and the low take up of course places might be because of the programmes' perceived lack of relevance to the stated educational needs of cancer nurses or due to financial stringency. **Whatever the reason, one of the implications for the Board of this key finding might be to try to ascertain why cancer care nurses have not followed such a course and how, nonetheless, they have become equipped to perform their professional duties as cancer care nurses at some level. Further research into their unmet educational needs (if any) and the most effective ways of meeting these could be advantageous.**

Nine major themes emerged from the literature, that the project team has identified as being important to include in educational programmes that prepare nurses for working with patients with cancer. Each has a range of subtopics within the major theme, as indicated in Appendix Six.

The main themes were:

- Prevention and detection/diagnosis
- The Nature of Cancer
- Treatment
- Psychosocial Care
- Rehabilitation and Survivorship
- Death and Dying
- Organisation of Care

- Key Skills
- The Future of Nursing

5.2 Educational Needs for Cancer Care Nursing

The nine key themes identified in the literature were used in chapter four to inform an exploration as to how far the current British courses are underpinned by an evidence base of appropriate course content. **In summary, the courses appear to draw on the literature appropriately with some significant exceptions: it would seem that the substantive issues of health promotion and rehabilitation need strengthening and that communication skills could usefully be further emphasised. Table 3.20 draws out the likely implications for the English National Board of the need to enhance communication skills with cancer patients.** Nurses' ability to assess and manage pain remains poor (Francke et al 1996c) despite almost two decades of educational and clinical concern. However, this is now being addressed in the curricula examined. **A further area that needs greater attention is the issue of the critical care nurse being alert and able to respond to the issue of oncological emergencies as a specific type of emergency within the critical care setting (Dickinson 1990).**

Chapter Three began by exploring the body of literature that identified the stated educational needs of nurses in respect of cancer care education. At the same time, the importance of the input of other stakeholders to course design and the risks attached to relying on the needs perceived by only one group of stakeholders was

recognised. The subsequent analysis of the RCN Cancer Nursing Education document and other relevant work revealed that in general the reported educational needs of nurses were the same as those of the professional experts in this field (Ropka et al 1992).

Although this particular body of literature was not in itself extensive, both British and American studies suggested that pain and symptom control and prevention and detection were likely to be significant educational requirements for nurses working in this field, especially for newly qualified nurses (Corner and Wilson-Barnett 1992; McMillan et al 1997). Corner and Wilson-Barnett (1992) also identified communication skills as being of considerable importance from the nurses point of view. The documentary analysis of the ENB 237 and ENB 240 programmes reported on in chapter four indicates that, whilst prevention and detection, together with pain and symptom control, were well covered in existing courses, communication skills specific to working with patients with cancer were less obviously apparent in the programmes. Some of the American literature also identified health promotion (McMillan et al 1997), terminal care and legal issues (Becker et al 1995) as important educational topics from the nurses' perspective. The British documentary analysis reported on in Chapter four indicates that increased emphasis on health promotion could be useful but that terminal care is well covered in the palliative care programmes (ENB 931, 285 and A18) and that all the cancer courses (ENB 237 and 240) examined were designed to deal with the legal issues involved in cancer care in some depth.

One American report of workshops for experienced cancer care nurses (Nash 1993) identified participants' future specific educational needs as being related as much to professional development for a senior nursing role as to the further development of their clinical skills. There was some evidence from the analysis of the British curricular in Chapter four that some modules in the cancer education programmes offer this kind of further professional development, especially in respect of research skills.

It was clear from the literature review that nurses and other stakeholders are not agreed on the importance of an understanding of rehabilitation in cancer care education. **One consequence of this was the significant absence of the topic of rehabilitation from the courses and modules analysed in chapter four, despite the recommendations of the Calman and Hine Report (DOH 1995).**

Two key topics emerged where it was apparent that nurses want greater input and where both they and other key stakeholders think their current knowledge is weak, and skills not very transferable: chemotherapy (Pike and Gibson 1991) and pain and its assessment and management. Table 3.14 might serve as a national standard of chemotherapy training within the Board's awards. **The sustainability of the educational impact of the programmes was questioned by both Corner and Wilson-Barnett (1992) in general and as regard chemotherapy nursing in particular by Grant et al (1996).**

5.3 Teaching, Learning and Evaluation Strategies

The concluding section of chapter three examined a range of studies that considered a variety of differing teaching and learning strategies. Several studies (Canel et al 1990, Grant et al 1996; Heaven and Maguire 1996) looked at the short term impact of the various educational programmes and found that the students' knowledge base had been enhanced in the short term. **Few studies, however, examined former students over a sustained period of time after the completion of the course in order to assess the longer term effectiveness of the educational experience. Similarly, there was a paucity of information relating to the effect of the educational programme on clinical practice (Camp-Sorrell and O'Sullivan 1991).**

Furthermore, an emerging concern is that of the depth of engagement that is possible within relatively short programmes that try to contain a wide body of material. **It might be important for the English National Board to examine carefully what material should be left out of such courses as much as what should be included in, at the various levels of the awards.**

Further research might usefully include an examination of appropriate teaching/learning strategies and their effectiveness in this field, especially the development of open/distance learning modules to take account of current working practices.

5.4 Assessment Issues

The type and amount of assessment could be usefully debated by the English National Board. Assessment strategies that rely upon checklists of competencies to be attained (as is often the case in the ENB 237/ENB 240 curricula examined in this research) are likely to result in only surface learning taking place. Interestingly, the Palliative Care programmes ENB 931, 285 and A18 tend to adopt a more reflexive approach to the assessment of clinical practice. Assessment strategies that require the students to demonstrate an understanding of the rationale behind the various tasks performed are likely to result in greater retention of the knowledge and its greater transferability to situations not specifically encountered on the course but which might well be encountered in professional nursing practice. **The problem of lack of transferability of skills between hospitals was identified by amongst others, Pike and Gibson (1991). Similarly, assessment overload could well detract from the value of the student learning experience and act as a distraction to course learning aims.**

5.5 Cancer Care Education and Palliative Care Education Programmes

An interesting comparison has been emerging throughout the documentary analysis between the ENB programmes specifically related to cancer care education (ENB 237, 240, A11 and N14) and those related to palliative care more generally (ENB

931, 285 and A18). One very strong component of the specific cancer education courses was the legal aspects involved in caring for those with this potentially life shortening and painful disease. This topic was given less prominence in the palliative care programmes where a greater emphasis within course content was placed on inter agency and team work, ethical and other issues involved in the allocation of scarce resources, and communication/counselling skills. These topics were less evident in the majority of the cancer education programmes analysed.

Another contrast between the two types of programme was the increased emphasis placed on the students' own experience of death, dying and bereavement in the palliative care programmes as a learning resource. This was designed to be carefully and ethically used within a learning environment which provided additional support from the student counselling and other appropriate services where necessary. There was also a greater emphasis on the role that complementary therapies might play in patient care than that found in the specific cancer education programmes. (ENB 237 and 240). **As has been noted elsewhere, there was perhaps not enough weight given to the topic of rehabilitation and survivorship in the specific cancer care education programmes although its omission was to be expected from those focusing on palliative care (ENB 931, 285, A18).**

5.6 Conclusion

In order to know how effective any of the current programmes are in the educational preparation of cancer nurses for their critical work in contributing to the Government's aims contained in Our Healthier Nation (DOH 1997) further research should seek to examine the following areas:

- **the patient's point of view of cancer and cancer nursing as they experience it;**
- **the views of service providers on the personal qualities and knowledge and skills they would ideally wish to find in cancer care nurses;**
- **the cancer nurse student's point of view of their own further training needs; and**
- **the views of educational providers, the staff in higher education institutions.**

Summary of Points	
•	The quality of nursing care provided is crucial in the achievement of the government's aims as set out in 'Our Healthier Nation' and it is important that cancer care education courses are designed so as to take account of the views of **all** the various groups of stakeholders
•	There is a shortage of evidence concerning the effectiveness of the delivery of cancer care and palliative care education programme.
•	Further empirical research is needed in order to gauge the effectiveness of the ENB's post registration cancer care and palliative care educational programmes.

APPENDICES

APPENDIX ONE: SEARCH STRATEGIES

Key:

adj:	adjacent
asterisk (*):	indicates truncation
de:	descriptor field. Indicates a single-word thesaurus term, e.g. *neoplasms in de*
/dt:	drug-therapy subheading
exp:	explode. Exploding a thesaurus term includes all the narrower terms
hyphen (-):	indicates a multi-word thesaurus term, e.g. *hospice-nursing*
/nu:	nursing subheading
/pc:	prevention-and-control subheading
/px:	psychology subheading
/th:	therapy subheading

Allied and Alternative Medicine (AMED)

Online Datastar, 9.4.98 1987 onwards

1. nurs or nurse or nurses or nursing
2. cancer or neoplas* or oncol* or tumor* or tumour*
3. hospice - care
4. terminal - illness or terminal - care
5. palliative - treatment
6. 1 and (2 or 3 or 4 or 5)

Applied Social Sciences Index and Abstracts (ASSIA)

CD - ROM 1987 - Spring/98

Keyword: nurs or nurse or nurses or nursing

and

Keyword: cancer or neoplas* or oncol* or tumor* or tumour* or hospice* or terminal or terminally or palliative

British Nursing Index (BNI)

CD - ROM 1994 - 12/97

cancer or neoplas* or oncol* or tumor* or tumour* or hospice* or terminal or terminally or palliative

CANCER - CD

(Cancer - related records from CANCERLIT and EMBASE)

CD - ROM 1987 - 12/97

nurs or nurse or nurses or nursing

Caredata

CD - ROM 1/98 edition

Title words:

1. cancer or neoplas* or oncol* or tumor* or tumour* or hospice* or terminal* or palliative

Keywords:

2. cancer or hospices or terminally ill people or dying
3. 1 or 2

CINAHL

CD - ROM: 1987 - 12/97 and also updated 6/98

1. exp oncologic - nursing
2. exp neoplasms/nu
3. hospice - nursing
4. oncologic - care
5. exp terminal - care
6. cancer - pain
7. exp chemotherapy - cancer
8. 1 or 2 or 3 or 4 or 5 or 6 or 7

Cochrane Library

CD - ROM Issue 2, 1998

1. nurs or nurse or nurses or nursing
2. cancer or neoplas* or oncol* or tumor* or tumour* or hospice* or terminal or terminally or palliative
3. 1 and 2

Current Research in Britain (CRIB)

CD - ROM 12th ed. 1997

1. nurs or nurse or nurses or nursing
2. cancer or neoplas* or oncol* or tumor* or tumour* or hospice* or terminal or terminally or palliative
3. 1 and 2

DHSS - DATA

Online, DataStar, 7.4.98 1987 onwards

1. cancer - nursing or terminal - nursing
2. terminal - care or terminal - patients or terminal - illness
3. terminally - ill - people
4. palliative - treatment
5. hospices in de
6. 1 or 2 or 3 or 4 or 5
7. pain in de
8. cancer or neoplas* or oncol* or tumor* or tumour*
9. nurs or nurse or nurses or nursing
10. 7 and 8
11. 8 and 9
12. 6 or 10 or 11

Dissertation Abstracts (DISS)

Online, DataStar, 18.5.98 1987 onwards

1. nurs or nurse or nurses or nursing
2. cancer or neoplas* or oncol* or tumor* or tumour*
3. hospice*
4. terminal adj (illness or care or patient*)
5. (terminally adj ill) or palliative
6. 1 and (2 or 3 or 4 or 5)

ENB

CD -ROM Vol 2 Issue 1 4/98

1. nurs or nurse or nurses or nursing
2. cancer or neoplas* or oncol* or tumor* or tumour* or hospice* or terminal or terminally or palliative
3. 1 and 2

Educational Resources Information Center (ERIC) and International ERIC

CD - ROM 1987 - 3/98

1. nurs or nurse or nurses or nursing
2. cancer or neoplas* or oncol* or tumor* or tumour* or hospice* or terminal or terminally or palliative
3. 1 and 2

Index to Theses accepted for Higher Degrees by the Universities of Great Britain and Ireland

Online, Internet, 19.5.98 1970 onwards

1. nurs or nurse or nurses or nursing
2. cancer or neoplas* or oncol* or tumor* or tumour* or hospice* or terminal or terminally or palliative
3. 1 and 2

Index to Scientific and Technical Proceedings (ISTP)

Online, BIDS, 29.6.98 1987 onwards

Title:

1. (nurs or nurse or nurses or nursing) and (cancer or neoplas* or oncol* or tumor* or tumour* or hospice* or terminal or terminally or palliative)

Conference:

2. (nurs or nurse or nurses or nursing) and (cancer or neoplas* or oncol* or tumor* or tumour* or hospice* or terminal or terminally or palliative)
   1 or 2

MEDLINE

CD - ROM 1991 - 3/98 and also updated 6/98

1. oncologic - nursing
2. exp neoplasms/nu
3. 1 or 2
4. neoplasms in de
5. exp pain/dt, nu, pc, px, th
6. 4 and 5
7. exp terminal - care
8. palliative - care
9. exp neoplasms/dt
10. hospices in de
11. cancer - care - facilities
12. nurs or nurse or nurses or nursing
13. 12 and (7 or 8 or 9 or 10 or 11)
14. 3 or 6 or 13

National Research Register (NRR)

CD - ROM 5/98 Version

1. nurs or nurse or nurses or nursing
2. cancer or neoplas* or oncol* or tumor* or tumour* or hospice* or terminal or terminally or palliative
3. 1 and 2

PsycLit

CD - ROM 1991 - 12/97

1. nurs or nurse or nurses or nursing
2. exp neoplasms
3. hospice in de
4. terminally - ill - patients
5. palliative - care
6. exp death - and - dying
7. death - attitudes
8. death - education
9. grief in de
10. pain - management
11. antineoplastic drugs
12. 1 and (2 - 11)

System for Information on Grey Literature in Europe (SIGLE)

Online, Blaise, 18.5.98 1980 onwards

1. nurs or nurse or nurses or nursing
2. cancer or neoplas* or oncol* or tumor* or tumour* or hospice* or terminal or terminally or palliative
3. 1 and 2

Sociofile

CD - ROM 1974 -12/97

1. nurs or nurse or nurses or nursing
2. exp cancer
3. hospices in de
4. terminal - care
5. terminal - illness
6. palliative
7. dying in de
8. death in de
9. death - attitudes
10. euthanasia in de
11. grief in de
12. pain in de
13. 1 and (2 - 12)

120

UNIVERSITY OF THE WEST OF ENGLAND
FACULTY OF HEALTH AND SOCIAL CARE
CENTRE FOR RESEARCH IN APPLIED SOCIAL CARE AND HEALTH

DATA EXTRACTION SHEET

Reviewer: ID NUMBER:

Author:

Title:

Journal:

Year, Volume, issue, page numbers:

Is the subject matter relevant or appropriate for the research questions? Yes/No

If not relevant or appropriate, complete action box below If original/primary research move to `A' If a literature review, move to `B' If something else that could be relevant or useful, continue

What is it?

What is the purpose of the article?

Is it accurate?

Is it well written and crediole?

Is the article in a peer reviewed journal?

Is the article accurately referenced (if appropriate)?

Does the article `ring true'?

Action Box		Tick
Included and appraised (a or b as over)		
Included but not appraised (as above)		
Excluded because:	Is not relevant to research questions	
	Is of doubtful quality and unusable	
	Is too short e.g. letter	
	Is an editorial or interview	
	Is a patient care study	
	Other reason (describe)	

Comments:

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A

ORIGINAL/PRIMARY RESEARCH (adapted from Gray, 1997)

Country:

Setting:

Research questions, hypotheses, aims, objectives etc:

Study design:

Sample/participants - numbers, how selected etc:

Data collection:

Data analysis:

Findings:

Did the authors address a clear question?

Did the authors use the most appropriate study design to answer the questions? (use tables 1 and 2 to aid decision)

Table 1

Type of research \ Intervention being assessed	Qualitative research	Case control	Cohort	RCT	Systematic review
Diagnosis			✓	✓✓	✓✓✓
Treatment			✓	✓✓	✓✓✓
Screening				✓✓	✓✓✓
Managerial innovation	✓	✓	✓	✓✓	✓✓✓

Table 2

Type of research \ Outcome	Qualitative research	Surveys	Case control	Cohort	RCT	Systematic review
Effectiveness of an intervention					✓✓	✓✓✓
Effectiveness of health service delivery	✓	✓	✓	✓	✓✓	✓✓✓
Safety	✓	✓			✓✓	✓✓✓
Acceptability	✓	✓			✓✓	✓✓✓
Cost-effectiveness					✓✓	✓✓✓
Appropriateness	✓	✓				✓✓✓
Quality	✓	✓	✓	✓		✓✓✓

Did the authors make their methods clear, so that others can see what they did?

Did the authors carry out the study rigorously, reliably, given the requirements of the study design?

Are the subjects/participants in the research similar enough to those in our situation, so that the results can be applied?

Given current resources, is it realistic to follow what was done in the study?

Overall comment regarding scientific quality and trustworthiness of the research

Return to page 1 and complete action box and comments

Reference: Gray, J.A.M. (1997) Critical Appraisal Evidence-based Health Policy and Management 1(1) 2-3

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B

LITERATURE REVIEW (adapted from Oxman and Guyatt, 1991)

Aim/questions addressed in review:

How were the search methods reported?

Was the search comprehensive?

What inclusion/exclusion criteria were reported?

Was selection bias avoided?

Were the validity criteria reported?

Was validity assessed appropriately?

Were the methods used to combine studies reported?

Were the findings combined appropriately?

Were the conclusions supported by the reported data?

What was the overall scientific quality of the review?

Return to page 1 and complete action box and comments

Reference: Oxman, A.D. Guyatt, G.H. (1991) Validation of an Index of the Quality of Review Articles Journal of Clinical Epidemiology 44(II) 1271-8

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APPENDIX THREE

Outline Curricula examined as part of the literature review.

Author	Title	Country of Origin
ANON (1996)	Post-basic graduate training in cancer nursing	Spain
Bachmann-Mettler (1988)	Education and training in Switzerland for nurses with different levels of knowledge in cancer nursing	Switzerland
Belani et al (1994)	Instruction in the techniques and concept of supportive care in oncology	USA
Bryant-Lukosius et al (1996)	Baccalaureate education in oncology nursing	Canada
EONS (1989)	A core curriculum for a post basic course in cancer nursing	Europe
Furlong (1994)	A Middle - East oncology experience	Middle East
Greene (1990)	The cancer nursing education project of the international union against cancer	International Union
Grobbelaar (1992)	Oncology nursing education in Southern Africa	South Africa
Krasuka (1996)	The graduate study education program in oncologic nursing	Poland
Lamb and Lynch (1997)	Collaborative practice in cancer education.	USA
Longman et al (1991)	Oncology knowledge inventory for undergraduate students	USA
Love et al (1995)	Paediatric oncology programme: McMaster University	Canada
Mak (1997)	Current review of cancer nursing in Hong Kong	Hong Kong
Nicholas et al (1994)	A collaborative program for international education	US/Japan

Pope (1992)	Fundamentals for a new concept of oncology nursing in the professional nursing education programme	Switzerland
Post-White et al (1993)	Cancer prevention and early detection in nursing students' knowledge, attitudes, personal practices and teaching	USA
Sarna and McCorkel (1995)	A cancer nursing curriculum guide for baccalaureate nursing education	USA
Stolte et al (1988)	An oncology nursing residency program: meeting a continuing education need	Canada

UNIVERSITY OF THE WEST OF ENGLAND

FACULTY OF HEALTH AND SOCIAL CARE

ENB CANCER CARE EDUCATION RESEARCH

DOCUMENTARY ANALYSIS

ANALYTICAL HEADINGS

General overview	0	Course Structure
General overview	1	Length/start date/period of approval
B	2	Compliance with ENB circula 1998/01
C	3	Knowledge themes drawn from the literature review
B	4	Clinical Competencies
General overview	5	Responsiveness to local need? national priorities?
B	6	Learning Outcomes a) multi-disciplinary/multi agency team work b) rehabilitation c) health promotion
B	7	Assessment Strategies: theory and practice

Institution		No of ENB course:	
Name of module:			
Aim of module:			
	Learning Outcomes	Practice Learning Outcomes	
Assess			
Plan			
Deliver			
Evaluate			
Underpinning knowledge			
Support to relatives etc			
Multidisciplinary/ multi agency teamwork Rehabilitation Health Promotion			
Assessment strategy			

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APPENDIX FIVE

UNIVERSITY OF THE WEST OF ENGLAND
FACULTY OF HEALTH AND SOCIAL CARE

ENB CANCER CARE EDUCATION RESEARCH
MODULE CONTENT ANALYSIS PROFORMA

Institution:	
ENB Course No:	
Name of Course:	
Name of module:	**M/O***
Level:	
No. of credits:	
Maximum class size:	
No of hours over number of weeks:	
School based hours:	
Individual tutorial hours:	
Student study hours (negotiable):	

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APPENDIX SIX

MODULE CONTENT SHEET

University of the West of England
Faculty of Health & Social Care

ENB CANCER CARE EDUCATION RESEARCH: LITERATURE ANALYSIS & DOCUMENTARY REVIEW

Institution: **ENB Course No:**

Emergent Themes from the Literature	Modules						
1. Prevention and Diagnosis Screening Health Education and Promotion Genetics							
2. Nature of Cancer Altered physiology Diseases Epidemiology Technical advances Cancer registration and monitoring							
3. Treatment Chemotherapy Radiotherapy Surgery Bone marrow transplant Immunotherapy Complementary therapy Genetics Symptom control Lymphoedema Nausea and vomiting Pain Pharmacology Site specific e.g. Breast Assessment Nutrition Fluid balance Oncology emergencies							

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4. Psychosocial Care Family centred care Meaning of illness Coping mechanisms Ethics Culture Gender issues Quality of life Patient information Listening Relationship skills							
5. Rehabilitation and Survivorship Late effects Reordering of life and life story Therapies							
6. Death and Dying Loss and grief Coping strategies Symptom control Theories Palliative care Spiritual care							
7. Organisation of Care Working with others Teams Roles Leadership Seamless care Calman and Hine Purchasing Shared protocols Interagency Role of the patient Information technology Mentorship and peer support							

8. Key Skills Leadership Analysis Clinical judgement Teaching Reflection Evidence based practice Audit Evaluation Synthesis Critical thinking Decision making Advocacy							
9. Future of Nursing PREPP Lifelong learning Clinical supervision Specialist practitioner Advanced practitioner							

THEMES.DOC

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QUALITY EDUCATION FOR QUALITY CARE
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THIRTY-SEVEN
JULY 1999

research HIGHLIGHTS

Cancer Nursing Education: Literature Review and Documentary Analysis

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Abstract

This project set out to undertake an extensive review of literature in the field of cancer care related to the education and preparation of cancer nurses. A comprehensive literature search and review was undertaken in seven stages. Within the literature reviewed nine key themes were identified as being significant to the cancer care education of nurses. The project also examined the range of post qualifying cancer nursing and palliative care courses approved by the English National Board. Such courses are offered in 51 English educational centres and course documents from five major centres were analysed. The curriculum analysis indicated that centres appear to be able to respond positively and rapidly to the changing cancer care agenda.

1. Main Findings

1.1 Within the literature reviewed, nine key themes were identified as being significant to cancer care nursing education:

i) prevention and detection/diagnosis;

ii) nature of cancer;

iii) treatment;

iv) psychosocial aspects;

v) rehabilitation and survivorship;

vi) death and dying;

vii) organisation of care;

viii) key skills; and

ix) the future of cancer nurse education.

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1.2 The key findings of the literature highlighted the importance of clinical experience within educational programmes, a factor which is increasingly difficult to achieve. Knowledge regarding the nature of cancer is seen as an important foundation to underpin practice and evidence based practice is demanded. Agreed national outcomes regarding competence in giving chemotherapy would be both advantageous and possible (Creaton et al, 1991). Areas for improvement include: knowledge of pain and pain assessment; educational support for cancer-related diagnosis for nurses working in critical care settings; the psychosocial aspects of care; interpersonal skills and rehabilitation and survivorship (Corner and Wilson-Barnett, 1992). There is a shortage of reliable studies yielding valid evidence regarding the effectiveness of the delivery of cancer care education and its subsequent impact on patient experience. The impact of cancer-related education for nurses on patient care needs to be researched further.

1.3 The documentary evidence indicated that educational centres appear to be able to respond positively and rapidly to the changing cancer care agenda. All awards analysed demonstrated compliance with English National Board stated learning outcomes. Programmes have been devised to reflect both local and national priorities. All awards attempted to integrate the assessment of theoretical and practical learning. There are some interesting comparisons to be made between cancer care education and palliative care education programmes.

1.4 The major weaknesses of the curricula analysed appeared to be in the areas of rehabilitation and interagency working. Whilst the programmes mostly appear to draw on research literature effectively, the substantive topics of health promotion, rehabilitation and communication skills could usefully be enhanced. In some programmes serious concerns might be raised about the issue of assessment overload.

1.5 The major implications arising from this study are:

i) the quality of nursing care provided is crucial to the achievement of the government's aims as set out in 'The Health of the Nation' (DoH 1992) reinforced in 'Our Healthier Nation' (DoH 1997) and it is important that cancer care courses are designed so as to take account of the views of all the various groups of stakeholders;

ii) it would appear that in some Trusts as few as 2% of qualified nurses working directly with patients for whom cancer is their primary diagnosis have undertaken any specialist cancer courses at all (Closs et al, 1997);

iii) there is a shortage of evidence concerning the effectiveness of the delivery of cancer care and palliative care education programmes;

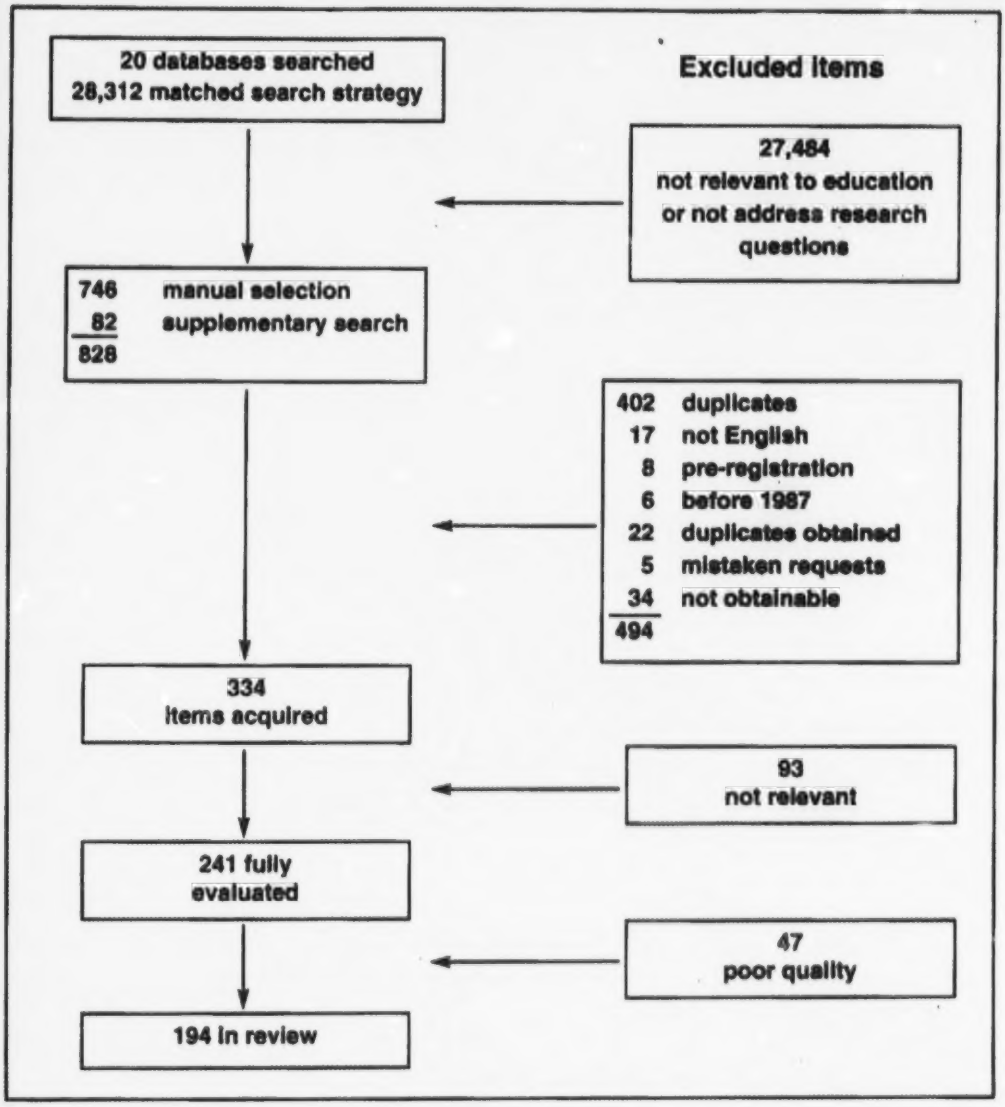
iv) further empirical research is needed to gauge the effectiveness of the English National Board's post-registration cancer care and palliative care educational programmes on patient care and clinical outcomes.

Methods

2.1 A comprehensive literature search and review was undertaken in seven stages. All literature selected was critically evaluated using a purposely designed data extraction sheet and previously validated tools. Twenty databases were searched, together with a number of key journals and indexes, and in all 334 items were obtained and evaluated by the reviewers. Of these, 93 were excluded by an initial assessment because they were not relevant, leaving 241 items that were fully evaluated. Within this figure, 194 were deemed to be of good quality and were included in the literature review of cancer nurse education.

2.2 Fifty-one centres offer English National Board post-registration cancer-related and

Summary of literature searching process



palliative care programmes. Course documents were sought from eight of the nine major centres (the University of the West of England was deliberately excluded). Twenty documents were returned for analysis from five of these major centres. Altogether, 78 individual modules were examined, using a series of specially designed module proformas. It was not possible to assess the effectiveness of either the programmes or their assessment strategies from documentary analysis alone.

2.3 Course documents were analysed to identify:

i) the degree of compliance with the English National Board's stated aims for each programme;

ii) how far course curricula currently draw on relevant research evidence related to the themes identified from the literature review; and

iii) how far the stated learning outcomes of the course relate to national healthcare priorities as regards cancer nursing.

Further information

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Details about the Project

The University of the West of England, Faculty of Health and Social Care was commissioned by the English National Board for Nursing, Midwifery and Health Visiting to undertake a twelve month literature review and documentary analysis of Cancer Nurse Education between January and December 1998. The study examined both literature in the field of cancer care related to the education and preparation of cancer nurses and the range of post qualifying cancer nursing and palliative care courses offered by English National Board.

The outcomes of the study were:

i) an analysis of the evidence base of curriculum learning outcomes of English National Board post qualifying cancer and palliative care courses;

ii) a comparison of knowledge and clinical competences derived from the documentary analysis; and

iii) an examination of assessment strategies with specific regard to the relationship between theory and practice.

The overall findings of the study will be of particular interest to educators and practitioners of cancer care nursing and palliative care, their managers and commissioners of post qualifying education in this field. They will also be of interest to those engaged in nursing research and the teaching of nursing research, especially in relation to the methodologies associated with literature reviewing and documentary analysis.

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RESEARCH HIGHLIGHTS
Published by
English National Board for Nursing, Midwifery and Health Visiting
July 1999
ENB

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